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THE JOURNAL OF THE Arkansas MEDICAL SOCIETY

June, 1973

Vol. 70 No. 1

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THE
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Arkansas
MEDICAL SOCIETY

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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JOHN P. WOOD
MENA
PRESIDENT
ARKANSAS MEDICAL SOCIETY
1973-1974

PROCEEDINGS

97th Annual Session

ARKANSAS MEDICAL SOCIETY

Arlington Hotel, Hot Springs

April 1-4, 1973

First Meeting

HOUSE OF DELEGATES

The first meeting of the House of Delegates convened at 1:10 P.M. on Sunday, April 1, 1973, in Room "C" of the Arlington Hotel Conference Center with Speaker of the House Amail Chudy presiding.

Invocation was led by W. Payton Kolb of Pulaski County.

The Executive Vice President, Mr. Schaefer, called the roll of delegates. The following delegates, officers, and members seated as delegates by action of the House were present:

ARKANSAS, R. H. Whitehead; ASHLEY, J. D. Rankin; BAXTER, M. Carolyn Wilson; BOONE, Robert H. Langston; CLARK, James T. Blackmon; CLEBURNE, William M. Wells; COLUMBIA, Charles L. Weber; CRAIGHEAD-POINSETT, James Sanders; CRAWFORD, Millard C. Edds; DALLAS, Jack T. Dobson; DESHA, Guy U. Robinson; DREW, J. P. Price; GARLAND, Edwin L. Harper, Robert Hill; GREENE-CLAY, J. Larry Lawson; HEMPSTEAD, Forney G. Holt; HOT SPRING, N. B. Kersh; HOWARD-PIKE, M. H. Wilmoth; INDEPENDENCE, Jim Lytle; JEFFERSON, Bobby J. Jenkins, T. E. Townsend; JOHNSON, Boyce W. West; LAWRENCE, Ralph F. Joseph; LEE, E. C. Fields; LOGAN, William R. Daniel; MILLER, Donald L. Duncan; MISSISSIPPI, Joseph E. Beasley; MONROE, N. C. David, Jr.; OUACHITA, A. E. Thorne; POPE-YELL, James D. Harbison, James M. Kolb, Jr.; PULASKI, Winston K. Shorey, Curry B. Bradburn,

James R. Weber, Kelsy Caplinger, Paul J. Cornell, Guy R. Farris, Charles Logan, James L. Smith, J. A. Harrel, Raymond Biondo, C. Allen McKnight, Ashley S. Ross, Gordon P. Oates, and George Mitchell; RANDOLPH, Albert L. Baltz; SALINE, Donald L. Viner; SEARCY, John A. Hall; SEBASTIAN, Samuel E. Landrum, Homer G. Ellis, Carl Williams, Robert P. Hughes, Jr., A. C. Bradford; SEVIER, James I. Balch; UNION, George C. Burton, C. E. Tommey; WASHINGTON, John M. Boyce, W. Ely Brooks, James Mashburn; WHITE, Lloyd Norris; COUNCILORS John B. Kirkley, John E. Bell, Dwight W. Gray, L. J. Pat Bell, Raymond A. Irwin, John P. Burge, Kenneth R. Duzau, J. B. Jameson, Karlton Kemp, C. Lynn Harris, James C. Bethel, Robert McCrary, W. Payton Kolb, William S. Orr, Morriss Henry, Henry V. Kirby, C. C. Long and A. S. Koenig; PRESIDENT Robert Watson; PRESIDENT-ELECT John P. Wood; FIRST VICE PRESIDENT Guy R. Farris; SPEAKER Amail Chudy; VICE SPEAKER Charles F. Wilkins, Jr.; SECRETARY Elvin Shuffield; TREASURER Ben N. Saltzman; PAST PRESIDENTS T. Duel Brown, H. King Wade, Jr., Joe Verser, C. R. Ellis, L. A. Whittaker, Ross Fowler, and Stanley Applegate.

James C. Bethel reported for the Credentials Committee that eighty-nine members of the House were present, constituting a quorum.

Upon the motion of C. C. Long, the House adopted the minutes of the 96th Annual Session as published in the June 1972 issue of the Journal of the Arkansas Medical Society.

The House also approved, by motion of William S. Orr, the minutes of the meeting of the House held on December 3, 1972, as published in the January 1973 issue of the Journal.

Speaker Chudy introduced Fred Heinemann, representing the Arkansas Chapter of the Student American Medical Association. Mr. Heinemann addressed the House briefly regarding the programs of SAMA.

Speaker Chudy also introduced Jim Miller as a representative of the Senior Class of the University of Arkansas School of Medicine.

Mrs. Erle E. Wilkinson, President of the Woman's Auxiliary to the Southern Medical Association, addressed the members of the House urging membership in the Southern Medical Association and participation in its annual meeting scheduled for November 12-15 in San Antonio.

Mrs. A. S. Koenig, president-elect of the Woman's Auxiliary to the Arkansas Medical Society, addressed the House representing herself as well as the Auxiliary President, Mrs. W. Myers Smith, who was unable to be present. Mrs. Koenig said the Auxiliary would be delighted to work closely with the Society during the year on some of the aims set out by President John P. Wood. The Auxiliary will publicize Mediredit, strive to increase ArkPac membership, seek more active participation in political campaigns; sponsor career days in schools with emphasis on medical careers, have joint meetings with the Auxiliary Advisory Committee twice a year, aim for making their "Project Compassion" a statewide program of one-to-one visitation for elderly people in rest homes without immediate families, and increasing Auxiliary membership. She also brought the membership up to date on the Arkansas Council for Health Careers and urged support of the Careers Council.

Mrs. Dennis Schreffler of Little Rock, national president-elect of the Woman's Auxiliary to the Student American Medical Association, was introduced by Speaker Chudy. Mrs. Schreffler spoke briefly regarding the gap existing between members of the medical profession and those who are in training to become physicians. She discussed WA-SAMA's programs on legislation, health careers, health manpower recruitment, maldistribution of physicians, international health program dealing with adjustment of physicians from other countries who

come to the United States to train, ecology issues, Medicine and Religion, and Mental Health. She stressed that WA-SAMA is an independent organization, but has close relationships with the Student American Medical Association, the American Medical Association, and the Woman's Auxiliary to the AMA. She urged Arkansas physicians to consider WA-SAMA a full-fledged organization in the community and suggested \$25 associate memberships by county societies as a means of physician support of WA-SAMA programs and efforts.

Speaker Chudy then introduced a special guest of the Society, C. A. Hoffman of Huntington, West Virginia, the president of the American Medical Association. Dr. Hoffman addressed the House relating some of his recent experiences as president of the AMA. He told of being one of the first civilians to meet with returning Prisoners of War, visiting Strategic Air Command headquarters in Omaha, and having recently been named a chief of the Blackfeet tribe. He discussed PSRO legislation as something not liked by physicians but the inevitable result of the billions of dollars being spent by the Government for health care. He expressed the feeling that controls must be by the providers and that physicians who work in professional standards review should be paid adequately for their services. Dr. Hoffman talked of his tour of Germany, Sweden, England and Russia last year and the fact that he found the same problem of the maldistribution of physicians that we have in this country. He spoke of the need for action in the area of catastrophic coverage. Dr. Hoffman stated that neither the Government nor the medical profession can give citizens good health care — that good health care starts with the individual himself — whether he drinks too much, eats too much, smokes too much, etc. He stressed the need for community action in the matter of physician distribution, stating that the community had a responsibility in bringing health care to its people. Dr. Hoffman also discussed the malpractice insurance situation and its effect on the cost of health care. Dr. Hoffman expressed concern that a second level of care might be developed with licensure of trained physicians' assistants and discussed other legislative issues such as Health Maintenance Organizations, National Health Insurance, etc. He urged physicians to stand up for what is right for this Country and

PROCEEDINGS



The 1973-74 Executive Committee and the Executive Vice President of the Arkansas Medical Society. From left: Elvin Shuffield, Little Rock, Secretary; C. C. Long, Ozark, Chairman of the Council; John P. Wood, Mcna, President; Ben N. Saltzman, Mountain Home, President-elect, and Mr. Paul C. Schaefer, Executive Vice President.



The Council of the Arkansas Medical Society in Session during the convention. In the background, from left, are Elvin Shuffield, Secretary; C. C. Long, Chairman of the Council; Mr. Paul Schaefer, Executive Vice President; Robert Watson, 1972-73 President, and John P. Wood, 1973-74 President. In the foreground are councilors A. S. Koenig, Payton Kolb, John Kirklev, Treasurer for 1972-73 Ben Saltzman, and Past President Stanley Applegate.

for the private enterprise system which made this Country great.

Speaker Chudy then called on President Robert Watson for his "President's Address". Dr. Watson thanked the members of the Arkansas Medical Society for the honor of having been permitted to serve as president. He expressed his appreciation to the staff and to the Auxiliary. Dr. Watson spoke of the frustration of having so little time in office in which to accomplish goals he may have had when he took office. He stressed that the medical profession should establish itself as being better informed and better prepared to serve the medical needs of the people of the State.

Speaker Chudy called on Mr. Schaefer, who introduced a new member of the headquarters staff, Mr. John McIntosh, Assistant to the Executive Vice President.

Chairman of the Council C. C. Long reported for the Board of Directors of the Arkansas Foundation for Medical Care. A meeting of the Board was held on April 1, 1973, and officers elected as follows: the office of president of the Foundation will be held by the Chairman of the Council of the Arkansas Medical Society; the office of secretary of the Foundation will be filled by the secretary of the Society; the office of treasurer will be filled by the Treasurer of the Society and the office of Executive Vice President of the Foundation will be filled by the Executive Vice President of the Society. Dr. Long reported that the Board of the Foundation had voted to make application to be the Professional Standards Review Organization for the State. Upon the motion of Long and Payton Kolb, the House gave its approval to these actions of the Foundation.

Speaker Chudy gave recognition to the three county medical society secretaries who submitted the first reports for 1973. They were: Richard C. Petty, secretary of the Lincoln County Medical Society; E. E. Estes, secretary of the Dallas County Medical Society, and R. H. Chappell, secretary of the Miller County Medical Society.

Speaker Chudy called for reports of committees. A report was given by the chairman of the Medical Legislative Committee, Elvin Shuffield, and was referred to Reference Committee Number Three. (Note: Please see page 8 for Dr. Shuffield's report.)

Speaker Chudy introduced Joe Verser, secretary of the Arkansas State Medical Board. Dr. Verser addressed the House on the Board's policy with regard to issuing temporary permits to graduates of foreign medical schools.

With Vice Speaker Charles F. Wilkins presiding, the House considered proposed amendments to the Constitution and By-Laws.

AMENDMENTS GIVEN FINAL APPROVAL

The following amendments were presented for second reading and adopted by the House.

- I. Chapter VIII, Section 1(a), delete Committee #14 "Committee on Continuing Education".
- II. Chapter VIII, Section 15, delete:
"The Committee on Continuing Education shall consist of ten members, one from each councilor district. The committee shall exercise leadership and responsibility in continuing review of the system of graduate medical education. It shall foster continuous efforts to increase excellence in the system of graduate education to serve the cause of medicine and to assure the public of continuing improvement in the graduate training of physicians in practice."
- III. Chapter VIII, Section 6, delete:
"The Committee on Medical Education shall serve this State for the Committee on Medical Education of the American Medical Association, and shall have referred to it all questions pertaining to medical education. It shall maintain close relations with the officials and faculty of the University of Arkansas School of Medicine, the Arkansas Academy of Family Practice, and other groups interested in maintaining and improving medical education in our State institutions. It shall foster continuous efforts to increase excellence in the system of postgraduate education to serve the cause of medicine and to assure the public of continuing improvement in the postgraduate training of physicians in practice. The committee shall consist of ten members, one from each councilor district."
- IV. Article IV, Section 2, delete:
"Only such person is eligible for active membership in a component society as (1) possesses the degree of Doctor of Medicine, issued by a medical school which at

PROCEEDINGS



Members of the Council and members of the Society from each of the councilor districts acted as hosts to the senior medical students at a luncheon on Monday of the convention.

the time such degree was conferred was approved by the Council on Medical Education and Hospitals of the American Medical Association, and (2) holds an unrevoked license to practice medicine and surgery issued by the Board of Medical Examiners which consists of members recommended by this Society."

and substitute:

"Only such person is eligible for active membership in a component society as possesses the degree of Doctor of Medicine and holds an unrevoked license to practice medicine and surgery by the Board of Medical Examiners which consists of members recommended by this Society."

With the vote of adoption of these proposals by the House, the above amendments are now incorporated in the Constitution and By-Laws of the Arkansas Medical Society.

AMENDMENTS APPROVED ON FIRST READING

Lee B. Parker, Chairman of the Constitutional Revisions Committee, presented the following proposed amendments to the Constitution and By-Laws and they were given approval by the House on the first reading. The amendments will be presented again in 1974 for final action by the House.

I. Chapter VII, Section 2, delete present section and substitute:

Section 1. Each councilor shall be organizer, peacemaker and censor for his district. The two councilors in each district shall be designated 'senior' or 'junior' on the basis of length of tenure.

Section 2. A meeting of the members in each councilor district shall be called by the councilor at least once each year within two months of the Annual Session for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and for informing, improving, and increasing the knowledge and zeal of the component societies and their members.

Section 3. The councilors shall jointly prepare and submit to the Council prior to the Annual Session a written report of their work and of the condition of the profession within their district.

Section 4. The necessary traveling expenses incurred by each councilor in the line of the

duties herein imposed may be allowed on submission of a properly itemized statement.

Chapter VI, Section 3, add as a second paragraph:

The vice presidents shall be assigned by the President of the Society as ex-officio members of certain committees of the Society. The vice presidents' responsibilities will be to stimulate, to guide, to maintain liaison, and to otherwise assist the assigned committees and their respective chairmen in the performance of their activities. In no instance will the vice president usurp or supplant the committee chairmen in his responsibilities. The vice president shall not have a vote in the affairs of the committees to which he is assigned under provisions of this section."

ARTICLE III, Component Societies, to read:

Component societies shall consist of those county medical societies which hold charters from this Society; provided, however, that there may be a chartered society known as the "Student, Intern and Resident Society" as provided in the by-laws.

ARTICLE IV, Section 2. Active Membership.

Change the last sentence in this paragraph to read:

The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing in any component society at the time of the adoption of this Section (Adopted, House of Delegates, 1937 Annual Session) nor to the members of the specially chartered "Student, Intern and Resident Society".

ARTICLE V, House of Delegates, amend by adding at the end of the paragraph:

and (4) one delegate from the "Student, Intern and Resident Society".

CHAPTER 1, Section 6 of By-Laws (Affiliate membership for interns and residents). Delete present section and substitute the following:

Special membership for Students, Interns and Residents

1. An annual special membership shall be granted to bona-fide students of medicine at the University of Arkansas School of Medicine and to Interns and Residents within the State of Arkansas who are physicians, provided that they are fully



Ben N. Saltzman, Mountain Home (left) will serve as president-elect during 1973-74 while John P. Wood of Mena (right) serves as president of the Arkansas Medical Society.



Mrs. A. S. Koenig, Fort Smith, (left) is the 1973-74 president of the Woman's Auxiliary to the Arkansas Medical Society. Mrs. George V. Roberson, Pine Bluff, is the president-elect of the Auxiliary.

or partially excused from the payment of county society dues, not to exceed ten percent of the dues charged active members of the Society, and provided that the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such special members.

2. The special members resulting from this section will comprise a single component group of the State Society similar to a county society, shall have privileges of speech, may serve on committees, will receive the Journal of the Arkansas Medical Society and shall be entitled to one voting representative in the House of Delegates.

Speaker Chudy called the attention of the House to the memorandum from the Eye Section which had been distributed. The memorandum was referred to Reference Committee #2 for

consideration. (See page 12 for the memorandum.)

Speaker Chudy also announced that a resolution received from the Union County Medical Society had been referred to Reference Committee Number One for consideration. (See page 12 for the Union County Resolution.) He urged members of the House to attend opening hearings of the Reference Committee and participate in the discussion of the various reports.

Speaker Chudy called on Society President Robert Watson for a presentation. Dr. Watson presented a check for \$6,619.88 to Dean Shorey from the American Medical Association Education and Research Foundation. The money may be used by the School for special projects or expenses not budgeted. Dean Shorey, in accepting the contribution, expressed thanks to the physicians and members of the Auxiliary for their contributions to AMA-ERF which made the grant possible.

Speaker Chudy reminded members of the House that a vacancy exists in the Third Con-

gressional District position on the Arkansas State Medical Board and urged members in that district to meet immediately following adjournment of the House to select a nominee for the vacancy.

Speaker Chudy then announced that the selection of the nominating committee for election of officers for the ensuing year would be made. Delegates from the various councilor districts held meetings on the floor and selected the following nominating committee:

First District: John Kirkley, Jonesboro

Second District: John E. Bell, Searcy

Third District: Dwight Gray, Marianna

Fourth District: C. Lewis Hyatt, Monticello

Fifth District: J. B. Jameson, Camden

Sixth District: Lynn Harris, Hope

Seventh District: Robert McCrary, Hot Springs

Eighth District: J. A. Harrel, Little Rock

Ninth District: R. H. Langston, Harrison

Tenth District: A. S. Koenig, Fort Smith

The first meeting of the House adjourned at 4:40 P.M.

REPORT OF THE LEGISLATIVE COMMITTEE

Elvin Shuffield, Chairman

Mr. Speaker, Officers, Delegates, members and guests of the Arkansas Medical Society:

This report is a first in the history of the Arkansas Medical Society. This is the first time we have been called upon to make a report before all the legislative processes have been completed.

Senate Bill 15 and House Bill 98 were of the same nature in which these bills guarantee freedom of choice between ocular practitioners for eye examinations or vision care when payment is from public funds. These bills passed both houses and were signed by the Governor and are now Act 10.

Senate Bill #33 by Senator Walmsley provides for an additional member of each board composed now of persons engaged in regulatory occupation and providing for additional member to represent consumer interest. This was commonly referred to as a consumer interest bill. This bill passed the Senate and remained in the House for several weeks and then was defeated on the floor of the House.

Senate Bill #44 by Moore amends Section 64-2004 relating to names of professional corporations was passed and signed by the Governor and is now Act 76.

Senate Bill #73 by Senator Henry and others requires reports of syphilis and other diseases to the Health Department Division of Communicable Diseases by laboratories and is now Act 60.

Senate Bill #76 by Senator Gibson removes disqualifications for occupational license solely because of prior felony conviction. This is Act 280.

Senate Bill #80 by Wilson and Moore amends Section 72-129 to permit persons who pass basic science examinations in other states to practice healing arts in Arkansas. This was amended in the Senate by the chiropractors and then failed to pass the Senate on January 31, 1973.

Senate Bill #345 by Senator Douglas would have done practically the same thing, was introduced but was never voted upon. It was withdrawn.

Senate Bill #85 by Senator Ingram and others amends Section 72-301 related to statutes related to licensing of chiropodists. This is now Act 31.

Senate Bill #132 by Moore and Walmsley designates the State Treasury as official depository of all funds of State agencies. This bill is still in Senate Committee.

Senate Bill #160 by Senator Ben Allen amends Act 175 of 1961, as amended, relating to nursing homes, hospitals or related facilities. This is now Act 86.

Senate Bill 220 by Patterson amends Controlled Drug Act 590 of 1971 as amended and prescribes penalties. This is now Act 186.

Senate Bill 358 by Senator Moore amends Section 84-1904(F) to exempt prescription drugs from sales tax. This has passed the Senate and is on the calendar in the House.

Senate Bill 382 by Patterson establishes a drug abuse authority and advisory commission and repeals Act 57 of 1972 special session. This was withdrawn.

Senate Bill 441 by Senator Henry amends Section 75-1045 and 75-1045(B) to provide that quantitative test for blood alcohol be made on all drivers involved in fatal accidents. This has passed the Senate and is in the House.

Senate Bill #459 by Senator Patterson amends Sections 2 and 5 of Act 57 to create Drug Abuse Authority of 7 members. This has passed both Houses.

Senate Bill 465 by Patterson creates office of Drug Control in the Health Department. This



Past Presidents Joe Verser, Robert Watson, Ross Fowler, C. Lewis Hyatt, L. A. Whittaker, Jack Kennedy and C. R. Ellis were guests of the Society for a breakfast on Wednesday morning of the convention.



The officers of the Arkansas Medical Society for 1973-74, with President John P. Wood at the center of the front row. Officers seated are (left to right) Guy R. Farris, first vice president; Robert Watson, immediate past president; Ben N. Saltzman, president-elect; President Wood; C. C. Long, chairman of the Council; Donald L. Duncan, second vice president; Elvin Shuffield, secretary; and Kenneth R. Duzan, treasurer. Standing, middle row, left to right, are: C. R. Ellis, past president; councilor Morris Henry; past president Joe Verser; councilors L. J. P. Bell, John P. Burge, Raymond A. Irwin, Karlton Kemp, Lynn Harris, speaker of the House Amail Chudy; councilors Paul Gray and Henry Kirby; vice speaker of the House Charles Wilkins; councilor William S. Orr. Back row, left to right, councilors James C. Bethel, John 7. Bell, J. B. Jameson, W. Payton Kolb, John B. Kirklev, and John H. Moore. Leah Richmond, Assistant Executive Vice President, is seated on the left.

has passed the Senate and is tied up in the House.

Senate Bill 95 by Senator Henry was a budget bill for the State Medical Board, but it was amended permitting the Board to have an attorney of its choice. This passed both Houses and was signed by the Governor and is now Act #446. There was not a dissenting vote.

House Bill 72 by Representative Brandon required certificate of syphilis test for students entering colleges, universities and vocational technical schools. This bill was passed by both Houses and there was so much adverse publicity and criticism that Mr. Brandon called the bill back from the Governor's office.

House Bill 183 by Representative Moore amends Section 28-607 to clarify circumstances under which doctors and nurses may testify. This is now Act 344.

House Bill 187 by Osterloh amends Act 141 of 1959 to increase membership on the State Examining Commission for Physical Therapists to 5 and to increase fees. This is now Act 139.

House Bill 241 by Representative Steve Smith prohibits members or employees of any State Regulatory Agency to receive income from business subject to the Agency's regulation. This is now in the House.

House Bill 289 by Holloway requires agency administering Medicare to establish schedule of physicians fees which shall be uniform throughout the State. This is now Act 416.

House Bill 332 by Representative Camp and others provides for certification of physicians trained assistants. This bill was withdrawn after several amendments and lots of misunderstandings and controversy. The Council of the Arkansas Medical Society instructed us in January not to pass this Legislation at this time. A resolution was adopted which calls for a study by the Arkansas Legislative Council of the feasibility of establishing a physician-trained assistant program.

House Bill 341 by Representative Charles Moore exempts medical practitioners from income tax if they practice in a city or town with a population not exceeding 5,000. This was never brought to a vote.

House Bill 346 by Beaumont prescribes consent procedures for surgical and medical treatment. It is now Act 329.

House Bill 369 by Alford makes all medical contraceptive procedures available through legally recognized channels. This is now Act 235 and what it really amounts to is permitting contraceptive procedures and advice to minors.

House Bill 390 by Representative Steve Smith requires all agencies to keep and make available to the public a record of all monies, receipts and expenditures, and property disbursements. This was defeated in the House. House Bill 391 by Steve Smith requires State Agencies to keep minutes of meetings to have them typed and made available to the public within ten days. This is tied up in the House.

House Bill 417 by Wilson and others amends Section 82-1115 relative to pharmacist's labeling prescriptions. This got a "do not pass" out of committee.

House Bill 546 by Patterson authorized physicians to use any antibiotic medication deemed adequate to treat or prevent venereal disease in newly born infants in lieu of silver nitrate. This was defeated in committee.

House Bill 599 by Carlton and others provides for licensing of clinical laboratory personnel by Medical Technology Board. This did not get up for a vote.

House Bill 621 by Steve Smith amends Section 37-205 to increase to 3 years the statutory limit in malpractice suits. This got a "do not pass" out of committee.

House Bill 812 by Honey provides members of doctors' and lawyers' families may be excused from jury duty in proceedings involving either. This is in committee and is a dead issue.

Senate Bill 400 and House Bill 747, both ambulance bills, are tied up.

Senate Bill 462 requires immunization of children against rubella before admittance to public or private schools. This has passed both Houses and is in the Governor's office.

House Bill 470 authorizes certified licensed embalmers to enucleate eyes from donors under Anatomical Gift Act.

House Bill 445 would amend Medical Practices Act as instructed by Arkansas Medical Society House of Delegates. It is now Act 486.

The Health Department apparently got about \$7.5 million dollars and the Medical Center apparently is going to get everything but Federal matching funds.

PROCEEDINGS



Kenneth G. Jones receives certificate from Scientific Exhibits co-chairman Charles W. Logan at the banquet on Tuesday. Dr. Jones' scientific exhibit placed first in judging.



Members of Dr. Wood's family were present for the inaugural banquet on Tuesday evening of the Convention. Mrs. Carl Barham (his sister), Mr. and Mrs. Roy Riales (his sister), and his youngest daughter, Kathy. C. R. Ellis and Mrs. Ellis shared the table with Dr. Wood's guests.

Senate Bill 644, the Area Health Education Center bill, is in the Senate.

As chairman of the Legislative Committee, I want to thank the physicians who worked in the Legislative Infirmary. Also, I want to express thanks to those physicians who assisted with legislative problems.

EYE SECTION, ARKANSAS MEDICAL SOCIETY

PRESENTED BY: Dr. Robert Hughes
Dr. Philip J. Deere,
President

TO: House of Delegates,
Arkansas Medical Society

In our current Medical Practices Act, there is an amendment passed in 1971, which reads as follows:

(p) Nothing in this Act shall be so construed as to prohibit service rendered by a physician's trained assistant, a registered nurse, or a licensed practical nurse if such service be rendered under the direct supervision and control of a licensed physician, and no medical services may be performed under this article except under the physician's direct personal, physical supervision in any of the following areas: (i) The measurement of the powers or range of human vision, or the determination of the accommodation and refractive state of the human eye or the scope of its functions in general, or the fitting or adaptation of lenses or frames for the aid thereof. (ii) The prescribing or directing the use of, or using, any optical device in connection with ocular exercises, visual training or orthoptics. (iii) The prescribing of contact lenses for, or the fitting or adaptation of contact lenses to, the human eye. Nothing in this section shall preclude the performance of routine visual screening.

This amendment should not be a part of our Medical Practices Act, and the Ophthalmologists of this State enlist the support of the Medical Society in seeking the repeal of this amendment. This section of the Act is discriminatory by singling out the office assistant in Ophthalmology and placing their duties outside the strict interpretation of the law.

The Members of the Eye Section wish to thank the Council of the Arkansas Medical Society for withdrawing its support of House Bill 332 (Medical Assistants Bill), which contained an amendment similar in wording to the one above. Had

such a law passed the assistant in Ophthalmology would have been singled out for exclusion from the Medical Assistants Bill. It should be made clear that we do not oppose the physician's assistant concept, or properly drafted legislation to provide them.

RESOLUTION

PRESENTED BY THE DELEGATES OF UNION COUNTY TO THE 97th ANNUAL SESSION OF THE HOUSE OF DELEGATES OF THE ARKANSAS MEDICAL SOCIETY

WHEREAS,

The President of the United States of America has of late made repeated attempts to curtail deficit spending by government agencies, discontinued some programs such as Regional Medical Program, Subsidized Research Fellowships in University Medical Centers, etc., exerted his efforts in good faith, whether they be right or wrong, to control inflation and,

WHEREAS,

It appears that many of these programs discontinued by the President accomplished little or nothing in the way of production of goods and services, but it appears that they were successful in spending considerable sums of tax dollars, and

WHEREAS,

Some of the larger medical organizations have failed to recognize Mr. Nixon's efforts as being in the best interest of the country but on the other hand have criticized his actions and have urged him to use his influence to restore and to enlarge some of these nonproductive programs,

WHEREAS,

That the House of Delegates of the Arkansas Medical Society's 97th Annual Session go on record commending our President, Mr. Richard M. Nixon, for his efforts to discontinue the various health programs that are nonproductive and not needed and that we recognize his courage in the stand he has taken to do his part to prevent complete monetary collapse in our Nation, and encourage him to continue with this same course of action in the future.

We recommend that copies of this resolution be sent to President Nixon, to each member of the Arkansas Delegation, to the Congress of the United States, the Governor of Arkansas and the President of the American Medical Association.

SCIENTIFIC SESSIONS

The General Session of the 97th Annual Meeting of the Arkansas Medical Society opened on Monday, April 2, 1973, with First Vice President Guy R. Farris presiding. Wen Jung Chiu, of Houston, spoke on Acupuncture. Following the lecture, Dola S. Thompson moderated a panel discussion on the subject, with Warren C. Boop, Jr., and Charles W. Quimby, Jr., both of the University Medical Center in Little Rock, participating in the panel program.

"The Family Practice Program at the University of Arkansas — Past, Present and Future" by John M. Tudor, Jr., of Little Rock, opened the second half of the morning program. Also on the program were Frank Agee of Gainesville, Florida, speaking on "Emergency Room X-Rays of the Head and Neck" and Gunter K. von Noorden of Houston, whose subject was "Strabismus".

Fred C. Inman, Jr., Second Vice President, presided at the scientific program on Monday afternoon. "Physicians and Surgeons Professional Liability: Quicksand Controversy" by Mr. John H. Lynch and Mr. Jon A. Roeder of the St. Paul Insurance companies was the first presentation. J. D. Millar of the United States Public Health Service discussed the "Current National Venereal Disease Crisis"; Michael E. Glasscock of Nashville, Tennessee, spoke on "Surgical Treatment of Vertigo"; B. L. Riggs of Rochester discussed "Diagnosis and Treatment of Primary Osteoporosis" and Clair E. Cox of Memphis concluded the program with an address on "Modern Trends in Therapy of Urinary Tract Infections".

Scientific lectures resumed Tuesday morning with Third Vice President Jim E. Lytle presiding. Bill L. Trantum of the University Medical Center moderated an Oncology Conference. The panel presentations were: "Trends in Chemotherapy of Cancer in Children", F. Stanley Porter of Durham, North Carolina; "Experience With Aspiration Biopsies", Merlin L. Trumbull of Memphis; and "Gynecological Neoplastic Le-

sions, Their Identification and Treatment" by Laman A. Gray of Louisville, Kentucky. A general discussion period followed the presentations.



J. A. Harrel and C. C. Long escort Ben N. Saltzman to the rostrum following his election to the office of president-elect on Wednesday of the convention.

RELATED MEETINGS

TUMOR CLINIC

The Association of Tumor Clinic Staff Members in Arkansas met on Monday in the Arlington Hotel with Spencer Raab of Little Rock as guest speaker. Association Chairman W. Mage Honeycutt presided.

ANESTHESIOLOGY

The Arkansas Society of Anesthesiologists met on Monday in the Arlington for a luncheon and business meeting. Wen Jung Chiu of Houston was guest speaker.

EAR, NOSE AND THROAT SECTION

The Ear, Nose and Throat Section met at 9:00 A.M. on Tuesday in the Arlington with Michael E. Glasscock of Nashville and Ellery C. Gay, Jr., of Little Rock as speakers.

EYE SECTION

The Eye Section met at 9:00 A.M. on Tuesday in the Arlington with George Schroeder of Little Rock; James Y. Massey, Little Rock; Gunter K. von Noorden of Houston; and Paul Wilson, Little Rock, as speakers.

EENT LUNCHEON

The Eye and Ear, Nose and Throat Sections met for a combined luncheon on Tuesday in the Arlington.

FAMILY PHYSICIANS

The Arkansas Academy of Family Physicians met for a luncheon meeting on Tuesday in the Arlington with David L. Barclay of the University of Arkansas School of Medicine as speaker. A board meeting followed the program.

INTERNAL MEDICINE

The Arkansas Society of Internal Medicine met for a luncheon and business session on Tuesday in the Arlington. James Wilson, Society president, presided at a program on PSRO.

OBSTETRICS-GYNECOLOGY

The Arkansas Section of the American College of Obstetricians and Gynecologists met on Tuesday in the Arlington with Laman A. Gray of Louisville presenting the scientific program.

PATHOLOGY

The Arkansas Society of Pathologists met for a luncheon and business meeting on Tuesday in the Arlington. Merlin Trumbull of Memphis was guest speaker.

PEDIATRICS

The Arkansas Chapter of the American Academy of Pediatrics met on Tuesday in the Arlington for a luncheon, business meeting, and program on Pediatric Oncology. F. Stanley Porter of Durham, North Carolina, D. H. Berry of Little Rock, and Ronald L. Baldwin of Magnolia were panelists for the program moderated by Betty Lowe of Texarkana.

RADIOLOGY

The Arkansas Chapter of the American College of Radiology held a luncheon and business meeting on Tuesday in the Arlington with Frank Agee of Gainesville, Florida, presenting a scientific lecture.

UROLOGY

The Urology Section met for a luncheon, scientific program and business session on Tuesday in the Arlington. Clair Cox of Memphis was the guest speaker.

ORTHOPAEDICS

The Arkansas Orthopaedic Society met for a luncheon and scientific program on Tuesday at the Rehabilitation Center. B. L. Riggs of Mayo Clinic presented the program.



OTHER ACTIVITIES

COUNCIL RECEPTION

The Council of the Society hosted a reception on Sunday evening for all members of the Society and their guests. The hotel ballroom was decorated with Antherium, paper fish, and greenery to give a Hawaiian effect. Members of the Executive Committee and their wives formed a receiving line. Many members of the Society attended the reception for an evening of fun and fellowship.

BLUE CROSS-BLUE SHIELD PARTY

On Monday evening, Arkansas Blue Cross-Blue Shield hosted a party at the Hot Springs Golf and Country Club for members of the Society and their guests. The hosts provided beer and a seemingly endless supply of shrimp. The Society is indebted to Blue Cross-Blue Shield for a wonderful party.

SENIOR MEDICAL STUDENT LUNCHEON

The Society hosted a luncheon for senior medical students on Monday, with councilor district representatives from the Society acting as hosts. There was an informal discussion of Medical Society aims, purposes and programs, and the desire for liaison and cooperation with the medical students.

FIFTY YEAR CLUB BREAKFAST

Members of the Fifty Year Club of the Arkansas Medical Society met for breakfast on Tuesday in the Arlington, with President D. B. Stough presiding. Those in attendance were: W. A. Hudson; T. N. Black; G. C. Coffey; W. K. Smith; A. Fletcher Clark of San Antonio, a guest; D. L. Owens; R. H. Whitehead; D. B. Stough; G. Allen Robinson; D. W. Goldstein; O. A. Smith; C. W. Jones; D. L. Mask; Ross



Members of the Fifty Year Club were guests of the Society at a breakfast meeting on Tuesday of the Convention. Club members present were: W. K. Smith, Ross Van Pelt, D. L. Owens, R. H. Whitehead, W. A. Hudson, G. C. Coffey, D. B. Stough, T. N. Black, G. Allen Robinson, D. W. Goldstein, Mac McLendon, C. W. Jones, D. L. Mask, O. A. Smith, and J. W. Morris. A Fletcher Clark was a guest at the meeting.

Van Pelt; Mac McLendon; J. W. Morris; and Dr. Davis, a guest of Dr. Morris.

Henry V. Kirby of Harrison was a guest of the club and he addressed the group on the subject "Medical Museum".

Ross Van Pelt of Eureka Springs succeeded Dr. Stough as president and G. Allen Robinson of Harrison was re-elected secretary of the Club.

PRESIDENT'S INAUGURAL BANQUET

The President's Banquet was held on Tuesday evening, April 3, in the Ballroom of the Arlington Hotel with the Society president, Robert Watson, presiding. Invocation was by Dr. Watson.

Dr. Watson expressed appreciation to Mrs. Louis K. Hundley for the decorations for the banquet.

President Watson introduced those seated at the head table as follows: C. C. Long, Chairman of the Council, and Mrs. Long; C. A. Hoffman, President of the American Medical Association, and Mrs. Hoffman; Mrs. Watson; John Wood, President-elect, and Mrs. Wood; Elvin Shuffield, Secretary and Chairman of the Legislative Committee, and Mrs. Shuffield; Mrs. A. S. Koenig, President of the State Auxiliary, and Dr. Koenig.

President Watson also introduced the following special guests: Mrs. George Roberson of Pine Bluff, President-elect of the State Medical Auxiliary, Mrs. Deany Reid of Fayetteville, President of the State Medical Assistants Society, Mr. Frederic André, Field Service Department of the American Medical Association, and Mr. and Mrs. John Gilbreath of the Baptist Medical Center in Little Rock.

An expression of appreciation was extended by President Watson to Arkansas Blue Cross-Blue Shield for the gracious hospitality of the preceding evening.

President Watson thanked Dr. Hoffman for participating in the meeting of the Arkansas Medical Society. Dr. Hoffman made brief remarks in response to Dr. Watson, stating that he always enjoyed visiting in Hot Springs and that the time spent at the meeting had been pleasant for him and his wife.

President Watson recognized R. H. Whitehead for his fifty-eight years of medical practice and D. L. Owens of Harrison for his attendance at fifty-three successive meetings of the State Society.

The co-chairman of the Scientific Exhibits Committee, Charles W. Logan, presented a certificate to Kenneth G. Jones, whose exhibit on "Uses of Silastic in Hand Surgery" has been judged the outstanding scientific exhibit. Placing second in judging was "A Selection of Cassettes for Use in Instructing Patients and Medical Students" by Harry Hayes. The third place award went to T. Dale Alford for his exhibit on "Use of Fresnell Prisms in Ocular Motility".

Past presidents of the Society were introduced by President Watson. Past presidents in attendance were T. Duel Brown, H. King Wade, Jr., Joe Verser, C. R. Ellis, C. Lewis Hyatt, L. A. Whittaker, Joseph A. Norton, Ross Fowler, Jack Kennedy.

In concluding his year as president of the Society, Dr. Watson made the following remarks:

"At this time I would like to, with true sincerity, thank the members of the State Medical Society for permitting me to serve as your president during the past year.

I want to thank Mr. Paul Schaefer, our executive vice president, and his whole staff for the prompt help and guidance they have always provided. Their courtesy, efficiency, and dependability have always been outstanding.

I want to thank my loving wife for the kindness, tolerance, support and understanding she has shown toward my tasks and responsibilities as president of our Society during this past year.

I want to thank my professional associates and the ladies of our own organization for their help in sharing my professional work during this past year.

This has not been a burdensome year, indeed, it has been a pleasant and productive one. This year has shown to me the many friends I have, it has made me ever appreciative of their good counsel and wholesome support.

I know that in the coming year John Wood will also experience this same wholesome support from our Society and that he will, in time, have the same feeling of appreciation that I now have for you.

This year has convinced me of the commendable quality of medicine that is practiced in this State and in this Country. This year has shown ever more strongly that the doctors of Arkansas and of the United States are they themselves the ones best prepared and most capable of the



Members of the House of Delegates in session on Sunday afternoon of the convention.

planning for the directing of the health care for the people of this State and of this Nation.

I feel that my serving this year as president of the Arkansas Medical Society has made me in every respect a better man, and for having had this honor of serving in this office, I do thank you."

Dr. Watson returned to A. S. Koenig a gift presented to him a year ago "with the cork intact". Dr. Koenig accepted the return of the gift and then presented it to Dr. Wood with best wishes for his year as president.

Dr. Watson presented the oath of office of president of the Arkansas Medical Society to Dr. Wood and turned the gavel over to him.

As his first duty as president of the Society, Dr. Wood presented to Dr. Watson a plaque expressing the appreciation of the Arkansas Medical Society for his service to the medical profession and to the people of Arkansas.

Dr. Wood then made the following address in accepting the office of president of the Society.

PRESIDENT'S ACCEPTANCE SPEECH

Dr. Watson, Dr. Hoffman, Lynn, wonderful ladies of the Auxiliary, fellow physicians and

guests — I am greatly honored by you tonight and I shall forever treasure your friendship. There is one dear friend absent tonight with whom I would like to have shared this evening — Dr. R. C. Dickinson of DeQueen and Horatio. Dr. Dickinson brought me to my first Arkansas Medical Society meeting twenty-one years ago, encouraging me continually to become an active, participating, working member of our Society. I miss him greatly as I know you do.

I want to express thanks to our executive vice president, Paul Schaefer, Leah Richmond and the fine headquarters staff that we have.

I would like to introduce guests of mine, members of my family who have been most helpful and dear to me — my sister, Mrs. Roy Riales and her husband, former Senator Roy Riales of Mena, and a former Speaker of the House of Representatives. My sister, Mrs. Carl Barham of Mena and my youngest daughter, Kathy. Also, the one who has stayed at home raising our five wonderful children and who has been most tolerant of my many absences to attend medical meetings this past twenty-one years — my wife,

Mildred. Thank you, dear, from the bottom of my heart!

Dr. Hoffman, I, too, extend my appreciation to you for taking the time from your duties and practice to share your experiences and wisdom with us. I compliment you on a job well done this past year. And to my fellow physicians I say that the officers of the AMA, the Board of Trustees and the most knowledgeable headquarters staff represent you well and conscientiously. This confidence we must relay to those few who are outside the AMA.

The expertise that was shown in planning and conducting the recent National Leadership Conference in Chicago and the AMPAC meeting in Washington was remarkable. Briefly, I would like to summarize those two most informative meetings. At the National Leadership Conference in Chicago February 16th, 768 of the Nation's top leadership in organized medicine responded. Almost twice as many as the AMA had hoped for. These medical leaders represented every state and the roll call included thirty-four State Society presidents and thirty-one presidents-elect, eighty-nine presidents and twenty-eight presidents-elect of large county medical societies, seventeen presidents of medical specialty societies, many other physicians and staff members from across the country who held key leadership responsibilities including representatives from the Student American Medical Association, interns, residents, in addition to the AMA officers, Board of Trustees, and the headquarters staff.

Seminars were held in such pertinent and current topics as "The Health Manpower Market Place", "The Medical Society and Relicensure", "Leadership Communication with the Membership", "The Thrust of Federal Legislation and Government Regulations in 1973", "Interns and Residents — Part of the Medical Team", "The New Unionization Movement — Is It For You?", "Medical Society — Planning Programs to Building Medical Society Membership in 1973", and PSRO.

We were welcomed by Dr. Hoffman and heard from House minority leader, Representative Gerald Ford, and Senator Bentsen from Texas, and Frank Carluccia, Under Secretary of H.E.W. The outstanding thing about this whole meeting was that every segment of medicine was allowed to be heard both in the seminars and

the summation conference. Anyone present was allowed to address pertinent questions to any of the officers or members of the Board of Trustees. It was a great and most informative meeting.

I must admit that one of the highlights was hearing Dr. Harry Schwartz, author of "The Case for American Medicine", who is a member of the Editorial Board of the New York Times and Professor of Journalism at Columbia University. He emphatically denounced the recent NBC news show "What Price Health" as incompetent and biased. As far as the present health care crisis, he reminded us that health care was never mentioned in the recent Presidential campaigns as a national issue and/or problem, apparently taking a back seat to inflation, housing, crime, pollution, education, skyjacking, abortion, and taxes.

While very complimentary of American Medicine, he also warned that many things needed correcting, such as maldistribution of physicians and medicine's inability to communicate with the public. He refuted the claim that American Health has been deteriorating as a result of the free enterprise method of Health Care Delivery. He suggested catastrophic illness legislation which is an integral part of our AMA-sponsored Mediscredit Bill. As for as the disadvantaged American, he stated that what must be sought after and achieved is the alleviation of poverty in ways that promote their integration as useful members of society — eliminating those despair-producing conditions such as poor nutrition and poor housing. Lastly, he sounded a warning against, and I quote, "the Utopian Kennedy-Griffith myth" and told us to open our windows and doors and begin to listen to other people and other views.

On March 10th, Dr. Kemal Kutait, Leah Richmond, Paul Schaefer, Dr. and Mrs. Payton Kolb and I attended the 1973 AMPAC Public Affairs Workshop with workshops in (1) improving communications effectiveness, (2) increasing PAC membership, (3) physicians' role in campaign evaluation and management, (4) strengthening your State PAC organization, (5) the Candidate support committee — where it's all happening, and (6) Federal health legislation and regulations in 1973. Again the format allowed all to speak and participate. We were addressed by Congressman Hastings of New York, Senator

Beall of Maryland, Congressman Michel of Illinois and Congressman Al Ullman of Oregon.

The high point of the final session of that meeting was to have George Bush and Bob Strauss on the same platform, who presented the aims of their respective parties and then received questions from the audience — ranging from such topics as the Watergate to John Connally (Republican or Democrat?).

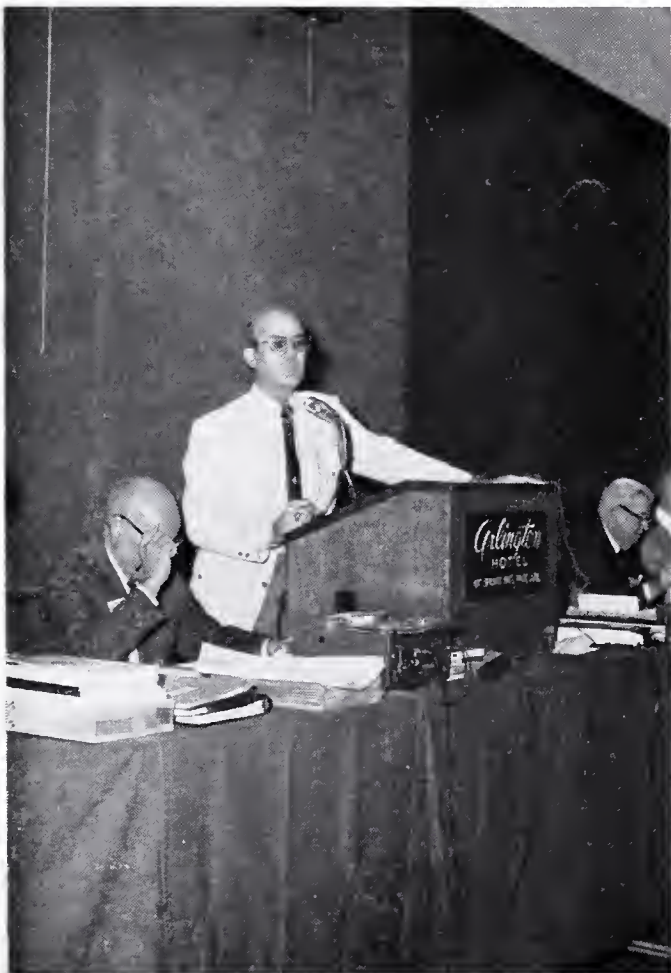
Now, these two meetings attracted some very prominent national figures and how do you think this happened to come about? Because of the influence of 250,000 united physicians in an organization that represents us and because of its united front can raise eyebrows and open the ears of many of our Nation's leaders. My hat is off to AMPAC and its fine officers and its programs on the national level. Have you wondered why we have the support of approximately 175 members of Congress for our AMA-sponsored Mediscredit Bill? The impact of AMPAC has allowed those doors to be open to American Medicine and let's don't kid ourselves otherwise. ARKPAC has a long way to go to meet its level

of obligations to AMPAC commensurate with most of the other states.

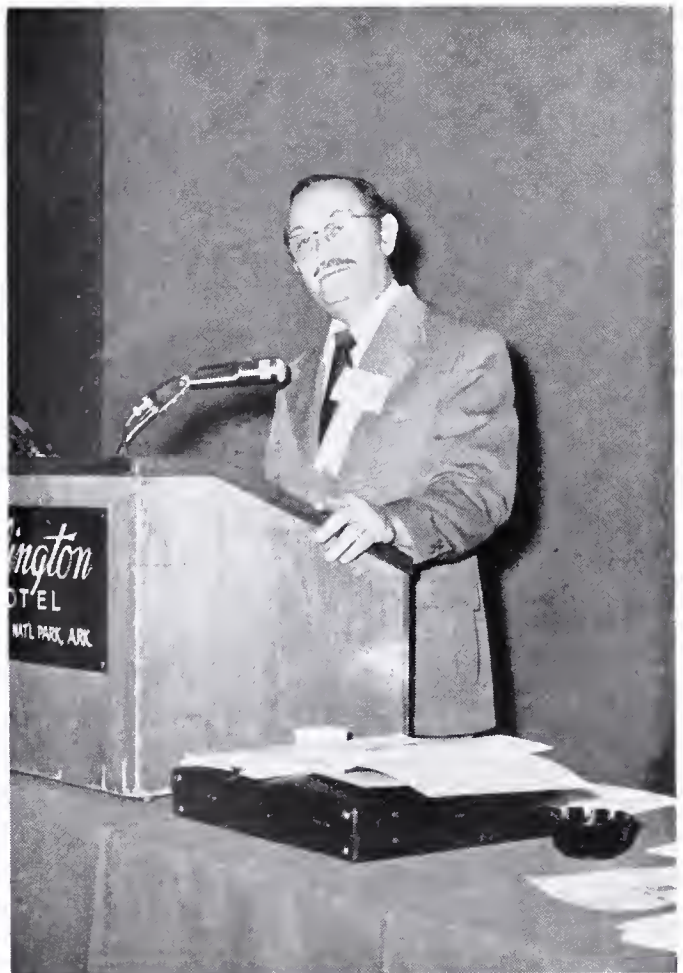
In 1969, the House of Delegates of AMA adopted the following policy: it is a basic right of every citizen to have available to him adequate health care and to have a free choice of physicians and institutions and the medical profession should endeavor to make medical care available to each person. Health care for the poor should not be disassociated from, but rather should be a vital part of, the over-all health care system.

The purposes of this Society are clearly spelled out in Article II of our State Constitution and we need to be aware of these purposes and strive to implement them at all times.

I believe, in addition to these policies and purposes, that we must listen to Dr. Schwartz' warnings, as well as the voices of the medical consumer, the patient. We must also establish better communications with our medical compatriots. I feel we must improve our communications in Arkansas with the leaders of the nursing profession. We must seek to re-establish dialog with them.



Speaker of the House Amail Chudy presiding at the session on Sunday afternoon.



Ben N. Saltzman thanks the members of the House of Delegates after being named president-elect.

Regarding current Arkansas health problems, we must strive to be better heard by Administration leaders. Lastly, we must strive to avoid the continual negative posture with the press.

How can this be done? By continuing to establish goals, simple but definitive and striving to achieve those goals in a straight-forward manner.

I say the concern for the American public as embodied in Medcredit should have high priority in our goals for 1973. Let's make Medcredit so well known that it is a household word.

Let's work to increase the membership and activity in ARKPAC so that it is an effective force in supporting State and National Medical Legislation that reflects our concern for the public welfare.

Let us reiterate and redirect to ourselves one of the purposes of this Society embodied in paragraph 6, Article II of our Constitution: to enlighten and direct public opinion in regard to the great problems of State Medicine, so that our profession shall become more capable and honorable within itself, and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

I want to be optimistic about 1973. Congress' budgetary fiscal responsibility with our inflationary trend gives us plusses for renewed Medcredit and minuses for the Kennedy-Griffith Bill.

You could sense the growing awareness of organized medicine's problems in Chicago and Washington amongst the leadership and the urgency to correct these deficiencies.

We believe with the experience and acceptance that we have had with Peer Review in this State for the past five years, that we can and must take the initiative in P.S.R.O. on a statewide basis.

We are hopeful and encouraged by the emphasis of the Family Practice Program at the Medical Center — and by what Dr. Dennis describes as a change in Student attitude towards family practice medicine — that we can reverse the trend of maldistribution of physicians in our State.

I am convinced that we need to look past the treasure chest in Washington to private industry, with emphasis on the health insurance industry,

for financial support for small community health facilities to better encourage and attract the family practice group.

It is also my feeling that in addition to the Medical Center's continuing education program, the time has come for physicians in the larger referral areas to give aid in providing medical education programs to the physicians in the smaller communities that they serve, providing additional incentive for the establishment of family practice groups.

We are encouraged by the increasing number of people with health insurance in Arkansas, especially the success of Blue Cross-Blue Shield under its excellent leadership. To Mr. Bob Taylor, we express our appreciation for the excellent television public relations program regarding medicine in Arkansas.

We can take pride in the interest and fine work of our ladies auxiliary and the many fine projects they have worked so long and so diligently for. We look with interest on their program, Project Compassion, an effort to comfort and aid the elderly in our nursing homes.

We can see the results of the efforts of many of our physicians who have worked tirelessly on our drug abuse problem.

We congratulate the Committee on Safety in conjunction with the Committee on Trauma Arkansas Chapter, American College of Surgeons, for their initiative and gains in improving emergency health services in Arkansas.

There are countless other achievements in Arkansas Medicine this past year, representing thousands of hours of unselfish work by the physicians of this State.

So, we have no need to be apologetic about the number and the extent of changes in the way medicine has been practiced in the past — we can take pride in the fact that the changes we have supported and put into effect have been good for those we serve . . . and that the accuracy of warnings and criticisms we have expressed about other changes thrust on us have been borne out. We have endeavored to be conscientious and responsible toward our obligation to provide better medical care. Our course has been consistently toward progress to improve medical care.

PROCEEDINGS



The oath of office of president of the Arkansas Medical Society is taken by John P. Wood of Mena. Robert Watson, 1972-73 president, administers the oath.



John P. Wood addresses the membership at the Inaugural Banquet on Tuesday evening of the convention.



About two hundred people attended the inaugural banquet on Tuesday evening of the convention.

We beg God to help save us from the liberal utopian fantasies of some. So I challenge all of you to leave this fine meeting as better spokesmen for organized medicine.

MEMORIAL SERVICE

A joint Memorial Service of the Arkansas Medical Society and the Woman's Auxiliary to the Arkansas Medical Society was held on Tuesday, April 3, 1973, in the Ballroom of the Arlington Hotel. The president of the Society, Robert Watson, presided.

The invocation was by the Reverend Doctor William Kryder of the First Presbyterian Church in Hot Springs.

Dr. Watson read the following names of deceased members of the Society:

Eldon L. Caffery, Jonesboro
W. T. Champion, Stuttgart
Calvin A. Churchill, Batesville
R. C. Dickinson, DeQueen
Floyd S. Dozier, Marianna
W. Gilbert Eberle, Little Rock
Charles W. Hall, Greenwood
O. J. T. Johnston, Batesville
Howell E. Leming, Fayetteville
R. C. Lewis, Camden
Alvin E. Longstreth, Little Rock
Garland D. Murphy, Sr., El Dorado
David H. Pontius, Jr., West Memphis
N. W. Riegler, Sr., Little Rock
W. A. Ross, Arkadelphia
Morgan H. Scott, Fort Smith
J. M. Sheppard, El Dorado
Philip E. Thomas, Alexander
W. L. Wozencraft, Fayetteville

Mrs. A. S. Koenig, president-elect of the Auxiliary, read the following listing of names of Auxiliary members who had died during the year:

Mrs. R. J. Calcote, Little Rock
Mrs. George F. Jackson, Little Rock
Mrs. H. A. Ross, Arkadelphia
Mrs. William L. Sadler, Little Rock
Mrs. J. K. Sheppard, Sr., El Dorado
Mrs. E. H. White, Little Rock

The Memorial Address was by M. H. Wilmoth of Nashville:

L'Envoi

*When Earth's last picture is painted and the
tubes are twisted and dried,
When the oldest colors have faded, and the
youngest critic has died,
We shall rest, and, faith, we shall need it,
lie down for an eon or two.
Till the Master of all Good Workmen
shall set us to work anew?
And those that were good shall be happy;
they shall sit in a golden chair;
They shall splash at a ten-league canvas
with brushes of comet's hair;
They shall find real saints to draw from;
Magdalene, Peter and Paul;
They shall work for an age at a sitting
and never be tired at all!
And only the Master shall praise us, and
only the Master shall blame;
And no one shall work for money, and
no one shall work for fame;
But each for the joy of the working,
and each in his separate star.
Shall draw the Thing as he sees it for the
God of Things as They Are!*

By Rudyard Kipling

We are here to honor those who are no longer with us physically, but remain indelibly imprinted in the memory of our minds because of their success in life.

He has achieved success who has lived well, laughed often and loved much; who has gained the respect of intelligent men and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it; whether by an improved poppy, a perfect poem or a rescued soul; who has never lacked appreciation of earth's beauty or failed to express it; who has always looked for the best in others and given the best he had; whose life was an inspiration; whose memory a benediction.

This is the success these physicians and wives are remembered for today.

Benediction was by Dr. Kryder.

FINAL SESSION

HOUSE OF DELEGATES

Speaker of the House Amail Chudy called the final meeting of the House of Delegates to order at 10:00 A.M. on Wednesday, April 4, 1973, in Room "C" of the Arlington Hotel. He called on C. Lewis Hyatt for the invocation.

The Executive Vice President, Mr. Schaefer, called the roll of members. The following delegates, officers, and members seated as delegates by action of the House were present:

ARKANSAS, R. H. Whitehead; ASHLEY, James D. Rankin; BAXTER, M. Carolyn Wilson; BOONE, Robert H. Langston; CLARK, James T. Blackmon; COLUMBIA, Charles L. Weber; CRAIGHEAD-POINSETT, James Sanders; CRAWFORD, Millard C. Edds; DALLAS, Jack T. Dobson; FRANKLIN, David L. Gibbons; GARLAND, Robert Hill, Patrick Knight; GREENE-CLAY, A. J. Baker; HOT SPRING, N. B. Kersh; HOWARD-PIKE, M. H. Wilmoth; INDEPENDENCE, Jim Lytle; JEFFERSON, T. E. Townsend; JOHNSON, Boyce W. West; LAWRENCE, Ralph F. Joseph; LOGAN, William R. Daniel; MILLER, Donald L. Duncan; MONROE, N. C. David, Jr.; PHILLIPS, Robert D. Miller, Jr.; POPE-YELL, James D. Harbison, James M. Kolb, Jr.; PULASKI, Winston K. Shorey, Curry Bradburn, James Weber, Kelsy Caplinger, Paul Cornell, Robert D. Dickins, Jr., Guy R. Farris, Charles Logan, Purcell Smith, Mayne Parker, James L. Smith, William N. Jones, J. A. Harrel, Raymond Biondo, Gordon P. Oates, and George K. Mitchell; SEBASTIAN, Samuel E. Landrum, Carl Williams, Robert P. Hughes, Jr., A. C. Bradford, and Kenneth Lilly; SEVIER, James I. Balch; UNION, C. E. Tommey, W. S. Rainwater; WASHINGTON, John M. Boyce, W. Ely Brooks. COUNCILORS John B. Kirkley, Paul Gray, Dwight Gray, L. J. Pat Bell, Raymond Irwin, John P. Burge, Kenneth R. Duzan, J. B. Jameson, Karlton Kemp, James C. Bethel, W. Payton Kolb, William S. Orr, Morriss Henry, Henry V. Kirby, C. C. Long; PRESIDENT John P. Wood; FIRST VICE PRESIDENT Guy R. Farris; SPEAKER Amail Chudy; VICE SPEAKER Charles F. Wilkins, Jr.; SECRETARY Elvin Shuffield; TREASURER Ben N. Saltzman, and PAST PRESI-

DENTS Joe Verser, C. R. Ellis, C. Lewis Hyatt, L. A. Whittaker, and Robert Watson.

Speaker Chudy called on the Chairman of the Nominating Committee, C. Lewis Hyatt, for a report. Dr. Hyatt presented the following proposed slate of officers.

For President-elect: Ben N. Saltzman, Mountain Home; L. A. Whittaker, Fort Smith.

For First Vice President: Guy R. Farris, Little Rock.

For Second Vice President: Donald L. Duncan, Texarkana.

For Third Vice President: Asa Crow, Paragould.

For Treasurer: Kenneth R. Duzan, El Dorado.

For Secretary: H. Elvin Shuffield, Little Rock.

For Speaker of the House of Delegates: Amail Chudy, North Little Rock.

For Vice Speaker of the House of Delegates: Charles F. Wilkins, Jr., Russellville.

For Councilors:

First District: Eldon Fairley, Osceola.

Second District: Paul Gray, Batesville.

Third District: Fred C. Inman, Jr., Carlisle.

Fourth District: Raymond A. Irwin, Pine Bluff.

Sixth District: Karlton Kemp, Texarkana.

Seventh District: James C. Bethel, Benton.

Eighth District: W. Payton Kolb, Little Rock.

Ninth District: Morriss M. Henry, Fayetteville.

Tenth District: C. C. Long, Ozark.

Dr. Hyatt proposed that the House vote on all offices with the exception of the office of president-elect and councilor for the fifth district. Upon motion by Raymond Irwin, the House unanimously elected the slate of officers with the exception of the office of president-elect and fifth district councilor.

L. A. Whittaker requested that his name be withdrawn from the slate. There were no further nominations for the office of president-elect and Ben N. Saltzman was elected unanimously.

Speaker Chudy requested that C. C. Long and J. A. Harrel escort Dr. Saltzman to the rostrum. Dr. Saltzman addressed the House as follows:

"Thank you, gentlemen. I think those of you who know me know that for the past twenty-seven years I have been a dedicated worker for the causes of organized medicine both in the Arkansas Medical Society and the American Medical Association. I think that you also know that I have been involved in many civic and voluntary activities over the State and in my own community for many years. Believe me, no honor means more to me than this honor you have bestowed upon me at this time. I promise you that I will follow in the footsteps of the wonderful men I have admired and respected over the years and will do everything in my power for the purposes to which the Arkansas Medical Society is dedicated — namely, the care of the people of this State. Thank you very much."

Dr. Hyatt then presented the Committee's nomination for the position of fifth district counselor. John H. Moore of El Dorado was nominated and the nomination was unanimously approved by the House.

Speaker Chudy expressed appreciation to the headquarters staff for their efficient handling of the convention and the House unanimously named Leah Richmond "Sweetheart of the House of Delegates".

Speaker Chudy then called on the Chairman of Reference Committee #1, Karlton Kemp, who made the following report:

REPORT OF REFERENCE COMMITTEE # 1

Mr. Speaker and members of the House of Delegates:

Your reference committee gave careful consideration to the items referred to it and submits the following report.

We submit for your acceptance the reports of six committees for adoption as published in the Journal and will make specific recommendations on the remaining resolutions that we received for consideration.

The report from the Committee on Public Health was submitted by Chairman Ben Saltzman. We take recognition of the very active program carried out by this committee during this year.

The Committee on Aging report from Chairman Joseph A. Norton indicated no activity. Our committee was grateful for this lack of activity in aging.

The report from the Sub-Committee on Liaison with the Auxiliary was received and discussed.

The report from the First, Second, Fourth, Fifth, Sixth, Seventh, Eighth and Ninth District Professional Relations Committees were received.

The report of the Executive Vice President, Mr. Paul C. Schaefer, was received and studied. We note the formation of the Arkansas Foundation for Medical Care.

The report of the Arkansas State Medical Board from Secretary Joe Verser was received.

The report from the School of Medicine by Dean Winston K. Shorey was received.

Mr. Speaker, I move that the foregoing reports, as discussed in detail, be accepted in their entirety by the House of Delegates. It was so ordered by the Speaker of the House inasmuch as there was no objection.

Mr. Speaker and members of the House of Delegates, this reference committee received the report of the Sub-Committee on Tuberculosis from Chairman John P. Wood. We note the fact that the Booneville Sanatorium was closed prior to the availability of designating hospital space for care of tuberculosis patients in certain areas of the State. Some cases were not suitable for transfer long distances to existing facilities, such as in Pine Bluff and, I believe, Jonesboro. In such cases, Dr. Doty Murphy, Director of Communicable Diseases Division of the Arkansas State Health Department, should be called for authorization of local hospital care until July 1. Facilities will be available in Fayetteville, Fort Smith, Texarkana, El Dorado, and Little Rock as of July 1. We recommend that those areas not now having chest clinics do develop them as soon as possible and, when appropriate, urge that the tubercular ill be referred to these chest clinics. Dr. Kemp moved acceptance of this portion of the report and it was so ordered.

Mr. Speaker, the Committee on Mental Health submitted a carefully worded resolution from Chairman W. Payton Kolb. We recommend the approval of the concept of health insurance for the mentally ill as suggested in the Reed Report and that the health insurance industry not deny coverage for drug overdosage and alcoholism. We further recommend that the House of Delegates encourage local physicians to become actively involved in their community mental health centers for evaluation of their effectiveness and

PROCEEDINGS



Members of the Executive Committee and their wives formed a receiving line for the Council reception on Sunday evening. They are, left to right, Dr. and Mrs. Elvin Shuffield, Dr. and Mrs. John Wood, Dr. and Mrs. C. C. Long, and Dr. and Mrs. Robert Watson.



Immediate past president Robert Watson receives a plaque of appreciation from the new president, John Wood.

assistance where appropriate. Dr. Kemp moved acceptance of this section of the report and it was so ordered.

Mr. Chairman and members of the House of Delegates, the Committee on Emergency Health Services submitted a report from Chairman Robert M. Bransford, and we recommend approval of the report as published in the Journal and recommend that the Arkansas Medical Society assume leadership in the efforts to plan and develop emergency health services. Much more participation by physicians throughout the State is urgently needed in this matter. We must help correlate ambulance and hospital emergency care. Dr. Kemp moved acceptance of this portion of the report and it was so ordered.

Mr. Speaker and members of the House of Delegates, the Arkansas Drug Abuse Authority submitted a report from Chairman Amail Chudy and we recommend the adoption of this report as submitted and move that the House of Delegates take measures to make available facilities for the treatment of patients suffering from drug abuse. Dr. Kemp moved acceptance of this portion of the report and it was so ordered.

Mr. Speaker and members of the House of Delegates, this reference committee received a resolution from the Union County delegates to the Arkansas Medical Society. Our committee received no favorable testimony for this resolution. Each discussant pointed out dissatisfaction with certain portions of this resolution. We move that this resolution not be adopted by the House of Delegates.

Speaker Chudy expressed appreciation to Chairman Kemp and to T. E. Townsend, Purcell Smith, and Stanley Applegate who had served with him on Reference Committee # 1.

The report of Reference Committee # 2 was made by Chairman James L. Smith.

REPORT OF REFERENCE COMMITTEE # 2

Reference Committee Number Two met in the Mars Suite with Lee Parker, J. E. Bell, and George Burton sitting with the chairman, James L. Smith.

The first item heard by the committee and its recommendation concerns the Sub-Committee on Traffic Safety report. The committee recommends that we recommend to the Legislature and/or the State Police that individuals, in being re-licensed, be examined at five-year intervals

for physical proficiency to drive. Your Committee also recommends that individuals involved in an automobile accident and requesting blood-alcohol level be run, the same which should be run at public expense. Mr. Speaker, we move the adoption of this portion of our report.

With Vice Speaker Wilkins presiding, the House voted to accept the report of the reference committee with an amendment changing the time interval for re-examination to every four years. Motion for the amendment to the report was by Orr of Pulaski County.

Committee on Medical Education. The committee recommends that the report of the Committee on Medical Education be accepted as printed in the Journal, and I move you, sir, the adoption of that printing. It was so ordered.

Committee on Continuing Education. The report as printed in the Journal has been passed to you by your committee and we move, sir, that the report be accepted as printed. It was so ordered.

The Committee on Liaison with the Nursing Profession. Your committee recommends the adoption of this report as printed in the Journal. We move you, sir, that the report be accepted as printed. It was so ordered.

The Committee on Medicine and Religion. Your reference committee does recommend that you accept the report as printed and we have been promised future meetings by Dr. Ellis. We move you, sir, that the report be accepted as printed.

The report of the Committee on Constitutional Revision has been printed and your committee recommends the adoption of that report as printed in the Journal. I move you, sir, that the report be adopted as printed. It was so ordered.

The report of the Eighth District Councilor. Your committee finds merit in the report and recommends its acceptance as printed in the Journal. I move you, sir, the adoption of this report. It was so ordered by the Speaker.

The report of the Arkansas Political Action Committee was made by Dr. Orr and was received as information by your committee. Those in attendance and your committee were struck with the severe need for much wider participation by the members at large in the PAC committees and recommends that the committees be supported so that we, in turn, will be able to



Mrs. A. S. Koenig, 1973-74 president of the Arkansas State Auxiliary, with convention guests, Mrs. Erle E. Wilkinson of Nashville, Tennessee, president of the Woman's Auxiliary to the Southern Medical Association (left), and Mrs. Willard C. Scrivner of Belleville, Illinois, president-elect of the Woman's Auxiliary to the American Medical Association (right).



The Auxiliary in session. In the left foreground are Mrs. Erle Wilkinson, Southern Medical Auxiliary president, Mrs. McDonald Poe and Mrs. Gerald Patton, convention co-chairmen, and Mrs. Willard Scrivner, AMA Auxiliary president-elect.

enter into the political arena in local elections as well as in the general elections at the National level. We accept and approve the report. The report of the Eye Section was made with its request that the Society take note that the physician's assistants in the ophthalmologists' office under the present Medical Practices Act are hampered severely by a paragraph that was inserted in the Medical Practices Act by optometrists and chiropractors in the Legislature. Your committee recommends that the Medical Society take a stand and recognize that the optometrists and the chiropractors in the Legislature did insert this paragraph into our Medical Practices Act in 1971 that limits the action of the assistant for the ophthalmologist to an untenable level. Your committee recommends that a concerted effort be made by the entire membership of the Arkansas Medical Society to right this wrong and remove this section that so delineates and removes the ophthalmologist from the rights of the general practice of medicine with its action from our Medical Practices Act. We recommend that this be planned two years hence and it will require the concerted effort of the members at large in realizing that the optometrists scattered over the State cannot be considered as substitutes for ophthalmologists, nor can they be allowed to successfully write paragraphs in our Medical Practices Act. I move you, sir, the adoption of these two reports as one. The House approved this portion of the report.

The report of the Arkansas State Arbitration Commission is reported in your Journal and your committee recommends the adoption of that report as printed.

Report of the Arkansas Regional Medical Program Advisory Group representative as printed in your Journal and the committee recommends the adoption of the report as printed. It was so ordered.

The report of the Medical Education Foundation for Arkansas. We received that report as it had been printed and your committee would like to emphasize that the annual donation of five dollars that is made in our dues to this very worthwhile cause be maintained as it is now, as a donation. This can be accomplished by adding the word "unaltered" after the word "receiving" in the last paragraph of this report so that it will read at that time "it is the Board's request that we be permitted to continue receiving unaltered

the annual State Society's support". Your reference committee recommends the adoption of this report with the addition of the word "unaltered". I now move, sir, that you adopt the report of this committee in its entirety. This report was approved by the House as amended.

Respectfully submitted by Reference Committee Number Two—George Burton, Lee Parker, John E. Bell and James L. Smith, Chairman.

Speaker Chudy called for the report of Reference Committee # 3. The following report from the committee was given by its chairman, Kemal Kutait:

REPORT OF REFERENCE COMMITTEE # 3

Your reference committee makes the following recommendations on matters referred to it for consideration.

Report of the Sub-Committee on State Health and Medical Resources for Civil Defense. The committee discussed the report and found it to be fully acceptable. Mr. Speaker, your committee recommends adoption of the report as recorded. The House gave its approval.

Committee on Insurance. The report of the Committee on Insurance was discussed at some length and found to be fully acceptable without controversy. Mr. Speaker, your committee recommends adoption of the committee report as recorded. There being no objection, it was so ordered.

Advisory Committee to the Medical Assistants Society. Mr. Chairman, your reference committee recommends adoption of the report of the Advisory Committee to the Medical Assistants Society as contained in the Journal. It was so ordered by the Speaker.

Report from the Arkansas State Advisory Committee to the Selective Service System. The content of this committee report was found to be non-controversial. Mr. Chairman, your reference committee recommends adoption of the Report from the Arkansas State Advisory Committee to the Selective Service System. It was so ordered.

Student AMA Liaison Committee. The report was discussed and the committee members thought that the student representatives should be commended for an excellent job and, Mr. Chairman, I recommend that the committee report be accepted as recorded. It was so ordered.

Medical School Committee. The Medical School report was discussed and well accepted.

We appreciate the better rapport with the University of Arkansas Medical Center that is evolving, at least in part, as a result of this committee. Mr. Chairman, the reference committee recommends adoption of the Report of the Medical School Committee as written. It was so ordered.

Report of the Council. The Report of the Council was discussed at some great length and found to be totally acceptable to the committee members. The committee felt that Dr. Long and the Council members should be commended for doing an outstanding job in representing the Society during the period the Society is not in session.

Mr. Chairman, your reference committee recommends adoption of the Report of the Council. It was so ordered.

Budget Committee. The budget was discussed as reported by Dr. Thomas and the committee felt that the delegates should be made aware of the fact that we, in fact, budgeted somewhat less than we will take in, which should be a source of pride in the Budget Committee's efforts and in the efforts of Mr. Paul Schaefer. Mr. Speaker, your reference committee recommends adoption of the Budget Committee report as reported. It was so ordered.

Report of the Arkansas State Department of Health Activities. The summary of the Arkansas State Department of Health activities by Dr. Harrel was discussed and found to be acceptable without controversy. Mr. Speaker, the reference committee recommends adoption of the report as contained in the Journal.

Report of the Arkansas Regional Medical Program from Executive Committee Member. The RMP program as presented by Dr. Watson was reviewed, found to be non-controversial, and fully acceptable. Mr. Speaker, your reference committee recommends adoption of the report of the Arkansas Regional Medical Program. It was so ordered.

Sub-Committee on National Legislation. The report of the Sub-Committee on National Legislation was reviewed, found to be fully acceptable, and non-controversial.

It was the committee's feeling that the Auxiliary to the Arkansas Medical Society has offered magnanimously to afford to disseminate information of the committee in regard to pending legislation. It is the recommendation of the com-

mittee that the delegates accept the Auxiliary members' generous offer to help us continue being aware of pending national legislation regarding health measures. Mr. Chairman, the committee recommends that the annual committee report on National Legislation be accepted as written and that the Auxiliary be thanked and accepted in their offer to disseminate information for us. It was so ordered.

Sub-Committee on Industrial Health. The committee report of this sub-committee was found to be fully acceptable and non-controversial. Mr. Speaker, your reference committee recommends adoption of the report of the Sub-Committee on Industrial Health.

The Legislative Report by Dr. Shuffield. The committee discussed in detail the report as submitted by Dr. Shuffield, having previously been exposed to it during the discussion of the Sunday, April 1, 1973, meeting of the House of Delegates and found it to not only be adequate but to also be highly commendable. The committee felt that Dr. Shuffield should, in fact, be given praise for an outstanding job in his continued representation of us in his legislative function. Mr. Speaker, the reference committee recommends adoption of the Legislative Report as presented by Dr. Shuffield. It was so ordered.

This concluded the report of Reference Committee Number Three by James Weber, T. E. Burrow, Dwight Gray and Kemal Kutait as Chairman. The House approved the report in its entirety.

Vice Speaker Wilkins requested that Dr. Shuffield stand and be recognized by the House. The extended applause was interpreted by Vice Speaker Wilkins as a "vote of confidence" by the House.

The Chair then recognized Dr. Shuffield for remarks he wished to make. Dr. Shuffield stated that a great deal of the appreciation of the House should go to Mr. Warren who spent a great deal of time at the Legislature. Dr. Shuffield urged younger physicians to get involved in working with their legislators. He advised the House of a study of the legislative processes in the State. He expressed doubt regarding the feasibility of some of the recommendations made as a result of the study. One recommendation was for a full-time Legislature or an annual session of the Legislature. Dr. Shuffield said he could foresee many problems under either plan — such as the

probable need for a full-time person assigned to the Legislature. He expressed a desire for a thirty-day legislative session for introduction of legislative proposals, a ninety-day recess for going home to discuss proposals with constituents, and then a thirty-day session for voting on legislative proposals. Dr. Shuffield advised the House that this report was just for their information.

Speaker Chudy recognized Mr. Eugene Warren for all the work that he has done. The House gave Mr. Warren a standing vote of appreciation. Mr. Warren introduced two guests — his wife, Betty Sue Warren, and his granddaughter, Rene Etwood — and expressed his thanks to the House.

Speaker Chudy called on the Chairman of the Council for a report. C. C. Long gave the following report on meetings of the Council held during the convention:

REPORT OF THE COUNCIL

The Council met on Sunday, April 1, and transacted the following business:

1. As a result of complaints by the Professional Services Review Organization of the Arkansas Medical Society regarding screening procedures for commercial health insurance claims submitted to it, the Council directed that a committee be appointed to bring back to the Council recommendations on handling of commercial insurance health claims.
2. Reappointed Joe Rushton to the Board of Trustees of the Medical Education Foundation for Arkansas.
3. Nominated C. C. Long to succeed A. S. Koenig on the Board of Trustees of Arkansas Blue Cross-Blue Shield.
4. Voted to add one family practice representative to the Professional Services Review Organization, giving that group a total of three representatives.
5. The Council voted to reaffirm its position that Professional Services Review Organization members having served a full three-year term after April 1970 are not eligible to succeed themselves.
6. Voted to defer selecting a third representative for the surgery specialty on the Professional Services Review Organization until three nominations are received from that section.
7. Elected Monroe Painter of Fayetteville to represent Internal Medicine on the Profes-

sional Services Review Organization to succeed Art Martin of Fort Smith.

8. Elected Paul Means of Little Rock to succeed John L. Weare representing Anesthesiology on the Professional Services Review Organization.
9. Elected Ray Jouett of Little Rock to represent Neurosurgery, succeeding Robert Watson.
10. Elected Kemal Kutait of Fort Smith and Guy Robinson of Dumas to represent Family Practice on the Professional Services Review Organization.
11. Elected Charles Logan of Little Rock to succeed Carl Wilson of Fort Smith as a representative of Urology on the Professional Services Review Organization.
12. Reappointed Thomas M. Durham of Hot Springs and B. P. Raney of Jonesboro to the Arkansas State Arbitration Commission.
13. Accepted and approved the annual report of audit of the Arkansas Medical Society.
14. Authorized expenses for W. Payton Kolb to attend an AMA meeting on Mental Health in Chicago.
15. Heard a report on the Workmen's Compensation survey by the Chairman of the Insurance Committee, Harry Hayes, and authorized the committee to continue negotiations. Authority was delegated to the Executive Committee to execute a contract on behalf of the Medical Society.
16. Discussed minimum requirements for participating in clinic services for the Welfare Department and authorized the Executive Committee to make the decision on a proper definition of a clinic for Welfare use.

Approved applications for exemptions as follows:

Retirement

E. C. Chaffin	William L. McNamara
Roy I. Millard	Brooks R. Teeter
Charles Ault	R. M. Blakely
Martha M. Brown	Alan G. Cazort
Hoyt L. Choate	Ellis P. Cope
Eva Dodge	Ruth Junkin
Harold Miller	James Nisbett
Carl Rosenbaum	Frances Rothert
W. A. Snodgrass	Irving J. Spitzberg
John M. Stathakis	Charles Wallis
Arthur Washburn	C. Fletcher Watson
Allen R. Russell	Joseph H. Downs

Jeff Baggett
Charles Brizzolara
LeMon Clark
Vincent Lesh
Ross Van Pelt
A. B. Dickey
Cal D. Gunter
M. C. Hawkins, Jr.
Horace Barnett
R. C. Shanlever
William F. Adams
Virgil N. Kennedy

H. L. Boyer
W. J. Butt
Joseph DeLaney
Lawrence Siegel
R. R. Kirkpatrick
H. K. Carrington
James L. Jackson
J. D. Kinley
William K. Bell
Harry W. Savery
Thomas P. Foltz

Charles B. Greene
Guy H. Gross
Surinder Gupta
H. M. Harmon
Ruben M. Harris
James R. Hildebrand
Alma Houston
Thomas T. Jefferson
Larry H. Johnson
Robert D. Johnson
Edwin C. Jones
G. Edward Cook
Charles B. Covert
Steven A. Davie
John C. Dobbs, Jr.
Leland Dodd
John D. Edmiston, II
R. Jeffery Eisenach
Jon R. Ewing
Joseph P. Fetzek
Ronald D. Fisher
James H. Fraser, Jr.
Cheryl D. Friday
Michael G. Futrell
Robert C. Galbraith
J. Richard Gardial
Wilbur M. Giles
Mary L. Powell
Alvaro Ramirez
Nancy F. Rector
Michael C. Reese
Philip E. Rosen
Rex W. Ross
Adam Roszel
Dwayne L. Ruggles
Charles F. Safley, Jr.

Carol A. Mittelstaedt
Charles M. McClain, Jr.
J. D. McConnell
James E. McDonald, II
Thomas E. McGinnis
William D. McKnight
Jeffrey Niemann
Edward R. North
H. Martin Northup
Donald H. Pennington
Sidney Simpkins
James M. Sims
Louis G. Singleton
Ricardo Sotomora
Hoy B. Speer, Jr.
Marolyn N. Speer
Davis Spurlock
Alan E. Stallings, Jr.
Charles D. Sullivan
Fletcher S. Sutton, Jr.
Herman A. Talley, II
A. Henry Thomas
James F. Thomas
Ginger T. Turley
Jan T. Turley
Joseph S. Udomsap
Tom Wallace
E. Walden Williams
Paul C. Williams
Ron N. Williams
Akhtar E. Yusufji
Robert M. Stainton
Jack T. Patterson
Maurice L. Stephens

Disabled

W. A. Regnier	Hunter Sims, Sr.
J. Max Roy	Daniel Autry
Bryce Cummins	John V. Busby
Henry A. Crane	Virgil L. Payne
B. F. Banister	Miles F. Kelly
Harry E. McEntire	John H. Williams
Eugene Hildebrand	H. H. Holt
R. A. Murchison	Charles E. Garratt
Dewey Sloan	

Military Service

Robert R. Sykes

Affiliate Membership for Interns and Residents

William J. James	Carl Nash
L. O'Neal Sutter	James Greenhaw
Jim C. Porter	James H. Hickman
Richard W. Miles	William D. Morris
Gerald W. Johnson	Al Thomas

Interns and Residents

(for period June 1972 to June 1973)

Luis F. Ardon	James L. Schrantz
Alan E. Aycock	George T. Schroeder
Thalerng Balachandra	Ladd J. Scriber
John A. Baldridge	Don Setliff
Ford Barnes	F. Richard Jordan
James Bean	Joe D. King
Margaret D. Beasley	Michael F. Koehl
James S. Beckman	Thomas R. Koehler
Robert A. Bell	Tom Kraus
F. A. Bennett, Jr.	Charles A. Ledbetter
Jack L. Blackshear	Virgle E. Lyons, Jr.
Jerry D. Blaylock	William Mason
James H. Bledsoe	James Y. Massey
Fay W. Boozman, III	Joseph W. Matthews
Hugh F. Burnett	Kenneth R. Meacham
David W. Burnsed	C. H. Miller
John D. Ginger	Franklin B. Minirth
James H. Golleher	Ord Jehu Mitchell

The Council met on Monday and transacted the following business:

1. Voted to recognize service on the Professional Services Review Organization by awarding a certificate of appreciation to retiring members. The Council accepted Blue Cross-Blue Shield's offer to furnish the certificates.
2. Heard and approved a report from the committee appointed on Sunday to study a system of review for commercial health claims. The committee recommended that all claims for adjudication be referred to the Arkansas Foundation for Medical Care office at the Medical Society headquarters in Fort Smith.
3. Voted to thank the Insurance Commissioner for his consideration of the views of the Ar-

kansas Medical Society in its protest of rate increases for malpractice liability insurance.

The Council met on Tuesday and conducted the following business:

1. Elected to the Board of Directors of Ark-Pac:
 J. Larry Lawson, Paragould
 G. Thomas Jansen, Little Rock
 Mrs. Charles F. Wilkins, Jr., Russellville
 A. C. Bradford, Fort Smith
 James D. Mashburn, Fayetteville
 Karlton Kemp, Texarkana
 Ross Fowler, Harrison
 James L. Smith, Little Rock
 Kemal Kutait, Fort Smith
 E. L. Hutchison, Pine Bluff
 Sybil Hart, Blytheville
 Mrs. Lynn Harris, Hope

The Council met on Wednesday and transacted the following business:

1. Elected Fred Jarvis of Fayetteville as the Psychiatry representative on the Society's PSRO.
2. Reappointed Raymond Irwin and Payton Kolb to represent the Society on the Board of the Arkansas Health Systems Foundation board of trustees.
3. Elected C. E. Tommey of El Dorado to the surgery position on the PSRO.

Upon motion of Long, the House approved the report of the Council. Speaker Chudy expressed thanks to Chairman Long for his many hours of work as Chairman of the Council.

Speaker Chudy recognized J. A. Harrel who moved that the House express its appreciation to Morris Henry for his dedication to the Arkansas Medical Society in his service in the Arkansas Senate. The House so voted and accorded Dr. Henry a round of applause.

Speaker Chudy advised that the members of the Third Congressional District had submitted the nomination of Ross Fowler for the vacancy on the Arkansas State Medical Board. There were no other nominations and the nomination of Dr. Fowler was unanimously approved.

Speaker Chudy asked for an invitation for the 1975 Annual Session. Winston Shorey of the Pulaski County delegation invited the Society to meet in that city in 1975. Upon the motion of James C. Bethel, the House voted to leave selection of the site for the 1975 meeting up to the Council.

The meeting of the House adjourned at 11:00 A.M.

REORGANIZATIONAL MEETING OF COUNCIL

The Council met for a brief reorganization meeting. It elected C. C. Long as chairman and Alfred Kahn, Jr., as Journal Editor for the ensuing year.

AMENDMENTS TO CONSTITUTION AND BY-LAWS APPROVED ON FIRST READING AT THE 1973 ANNUAL SESSION

- I. Delete Section 2 of Chapter VII (page 10) and substitute the following paragraphs:
 "1. Each councilor shall be organizer, peacemaker and censor for his district. The two councilors in each district shall be designated 'senior' or 'junior' on the basis of length of tenure.
2. A meeting of the members in each councilor district shall be called by the council at least once each year within two months of the Annual Session for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and for informing, improving, and increasing the knowledge and zeal of the component societies and their members.
3. The councilors shall jointly prepare and submit to the Council prior to the Annual Session a written report of their work and of the condition of the profession within their district.
4. The necessary traveling expenses incurred by each councilor in the line of the duties herein imposed may be allowed on submission of a properly itemized statement."
11. Under Section 3, Chapter VI, add a second paragraph:

"The vice-presidents may be assigned by the President of the Society as ex-officio members of certain committees of the Society. The vice-presidents' responsibilities will be to stimulate, to guide, to maintain liaison, and to otherwise assist the assigned committees and their respective chairman in the performance of their activities. In no instance will the Vice-President usurp or supplant the committee chairman in his responsibilities. The Vice-President shall not have a vote in the affairs of the committees to which he is assigned under provisions of this section."

III. Amend Article III, Component Societies, to read:

"Component societies shall consist of those

county medical societies which hold charters from this society; provided, however, that there may be a chartered society known as the 'Student, Intern, and Resident Society' as provided in the by-laws."

Amend Article IV, Section 2: Active Membership. Change the last sentence in this paragraph to read:

"The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing in any component society at the time of the adoption of this Section (Adopted, House of Delegates, 1937 Annual Session) nor to the members of the specially chartered 'Student, Intern, and Resident Society'."

Amend Article V, House of Delegates, by adding at the end of the paragraph: "and (4) one delegate from the 'Student, Intern, and Resident Society'."

Delete Section 6, Chapter I of By-Laws (Affiliate membership for Interns and Residents) New Section 6, Chapter I of By-Laws: "Special

membership for Students, Interns and Residents

1. An annual special membership shall be granted to bona-fide students of medicine at the University of Arkansas School of Medicine and to Interns and Residents within the State of Arkansas who are physicians, provided that they are fully or partially excused from the payment of county society dues, not to exceed ten percent of the dues charged active members of the Society, and provided that the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such special members.
2. The special members resulting from this section will comprise a single component group of the State Society similar to a county society, shall have privileges of speech, may serve on committees, will receive the Journal of the Arkansas Medical Society and shall be entitled to one voting representative in the House of Delegates."

OFFICERS OF THE ARKANSAS MEDICAL SOCIETY 1973-1974

President.....	John P. Wood, 907 Mena, Mena 71953
President-elect.....	Ben N. Saltzman, 126 West Sixth, Mountain Home 72653
First Vice President.....	Guy R. Farris, 6213 Lee Avenue, Little Rock 72205
Second Vice President.....	Donald L. Duncan, P. O. Box 778, Texarkana 75501
Third Vice President.....	Asa A. Crow, 320 South 10th, Paragould 72450
Secretary.....	Elvin Shuffield, 1000 Wolle, Little Rock 72202
Treasurer.....	Kenneth R. Duzan, 443 West Oak, El Dorado 71730
Speaker, House of Delegates	Amail Chudy, 1801 Maple, North Little Rock 72114
Vice Speaker of House	Charles F. Wilkins, Jr., 3005 W. Main Place, Russellville 72801
Journal Editor	Alfred Kahn, Jr., 1300 West Sixth, Little Rock 72201
Delegates to AMA	C. C. Long, 110 West Commercial, Ozark 72949 Purcell Smith, P. O. Box 5148, Little Rock 72205
Alternates	Joe Verser, P. O. Box 106, Harrisburg 72432 T. E. Townsend, 1310 Cherry, Pine Bluff 71601
Executive Vice President	Mr. Paul C. Schaefer, P. O. Box 1208, Fort Smith 72901

PROCEEDINGS

EXECUTIVE COMMITTEE OF THE COUNCIL

Chairman of the Council.....C. C. Long, 110 West Commercial, Ozark 72949

President.....John P. Wood, 907 Mena, Mena 71953

President-elect.....Ben N. Saltzman, 126 West Sixth, Mountain Home 72653

Secretary.....Elvin Shuffield, 1000 Wolfe, Little Rock 72202

COUNCILORS

Dis. trict	Councilor Term Expires '74	Councilor Term Expires '75	Counties in District
1.	John B. Kirkley P.O. Box 1478 Jonesboro 72401	*Eldon Fairley P.O. Box 68 Osceola 72370	Clay, Craighead, Crittenden, Fulton, Greene, Lawrence, Mississippi, Poinsett, Randolph and Sharp
2.	John E. Bell 1400 West Pleasure Searcy 72143	*Paul Gray P.O. Box 82 Batesville 72501	Cleburne, Conway, Faulkner, Independence, Izard, Jackson, Stone and White
3.	*L. J. P. Bell 626 Poplar Helena 72342	Fred C. Inman, Jr. 521 North Williams Carlisle 72024	Arkansas, Cross, Lee, Lonoke, Monroe, Phillips, Prairie, St. Francis and Woodruff
4.	John P. Burge 434 S. Cokley Lake Village 71653	*Raymond Irwin 1421 Cherry Pine Bluff 71601	Ashley, Chicot, Desha, Drew, Jefferson and Lincoln
5.	*J. B. Jameson, Jr. 110 Harrison, S.W. Camden 71701	John H. Moore 615 West Grove El Dorado 71730	Bradley, Calhoun, Cleveland, Columbia, Dallas, Ouachita and Union
6.	C. Lynn Harris P.O. Box 550 Hope 71801	*Karlton H. Kemp 408 Hazel Texarkana 75501	Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Pike, Polk and Sevier
7.	*Robert F. McCrary 505 West Grand Hot Springs 71901	James C. Bethel 415 West Ashley Benton 72015	Clark, Garland, Grant, Hot Spring, Montgomery and Saline
8.	William S. Orr, Jr. 926 Donaghey Bldg. Little Rock 72201	*W. Payton Kolb 1120 Marshall Little Rock 72202	Pulaski
9.	*Henry V. Kirby 651 N. Spring Harrison 72601	Morris M. Henry P.O. Box 1225 Fayetteville 72701	Baxter, Benton, Boone, Carroll, Madison, Marion, Newton, Searcy, Van Buren and Washington
10.	A. S. Koenig 922 Lexington Fort Smith 72901	*C. C. Long 110 W. Commercial Ozark 72949	Crawford, Franklin, Johnson, Logan, Perry, Pope, Scott, Sebastian and Yell

*Senior Councilor.

COMMITTEES—ARKANSAS MEDICAL SOCIETY—1973-74

	Term Expires		Term Expires
COMMITTEE ON CANCER CONTROL		Ben N. Saltzman, 126 West Sixth, Mountain Home 72653 — <i>CHAIRMAN</i>	1976
Robert L. McDonald, P. O. Box 7863, Pine Bluff 71601	1974	Bryant S. Swindoll, 4815 West Markham, Little Rock 72205	1976
Harmon Lushbaugh, 740 Lollar Lane, Fayetteville 72701	1974		
Gilbert D. Jay, III, 200 South Rhodes, West Memphis 72301	1975	SUB-COMMITTEE ON MATERNAL AND CHILD WELFARE	
Herbert B. Wren, P. O. Box 1409, Texarkana 75501	1976	John W. Trieschmann, 236 Woodbine, Hot Springs 71901	1974
Charles R. Henry, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1976	E. Stewart Allen, 417 North University, Little Rock 72205 — <i>CHAIRMAN</i>	1974
		Ewing C. Reed, Jr., 1119 Bishop, Little Rock 72202	1975
COMMITTEE ON MEDICAL LEGISLATION		J. S. McKinney, 209 Thompson, El Dorado 71730	1976
Asa Crow, 320 South 10th Street, Paragould 72450	1974		
James D. Mashburn, 207 East Dickson, Fayetteville 72701	1974	SUB-COMMITTEE ON TUBERCULOSIS	
Robert F. McCrary, 505 West Grand, Hot Springs 71901	1974	C. Clyde Tracy, 1421 Cherry, Pine Bluff 71601	1974
Elvin Shuffield, 1000 Wolfe, Little Rock 72202 — <i>CHAIRMAN</i>	1975	Edgar J. Easley, 4815 West Markham, Little Rock 72205	1974
Joe Verser, P. O. Box 106, Harrisburg 72432	1975	Jim Citty, P. O. Box 391, DeQueen 71832	1975
Allie E. Andrews, 315 East 5th, Texarkana 75501	1975	Lawrence C. Price, P. O. Box 3006, Fort Smith 72901 — <i>CHAIRMAN</i>	1975
Paul L. Rogers, P. O. Box 3096, Fort Smith 72901	1976	L. J. Pat Bell, 626 Poplar, Helena 72342	1976
Martin Eisele, 101 Whittington, Hot Springs 71901	1976	Karlton Kemp, 408 Hazel, Texarkana 75501	1976
Robert Watson, 1026 Donaghey Building, Little Rock 72201	1976		
		COMMITTEE ON AGING	
SUB-COMMITTEE ON NATIONAL LEGISLATION		John F. Guentlmer, 126 West Sixth, Mountain Home 72653	1974
George F. Wynne, 113 West Cypress, Warren 71671	1974	Ivan H. Box, P. O. Box E, Huntsville 72740	1974
Dale Alford, 5700 West Markham, Little Rock 72205	1974	Woodbridge E. Morris, 5326 West Markham, Little Rock 72205	1975
George W. Jackson, 4313 West Markham, Little Rock 72205	1975	Bill D. Stewart, 415 North University, Little Rock 72205	1976
G. Thomas Jansen, 500 South University, Little Rock 72205	1975	Gordon P. Oates, 1612 Maryland, Little Rock 72202 — <i>CHAIRMAN</i>	1976
William S. Orr, Jr., 926 Donaghey Building, Little Rock 72201 — <i>CHAIRMAN</i>	1976	Thomas E. Burrow, 903 West Grand, Hot Springs 71901	1976
Morris M. Henry, P. O. Box 1225, Fayetteville 72701	1976		
		SUB-COMMITTEE ON PHYSICAL FITNESS AND SCHOOL HEALTH	
COMMITTEE ON PUBLIC HEALTH		J. A. Harrel, Jr., Route 5, Box 615A, Little Rock 72207	1974
Gordon P. Oates, 1612 Maryland, Little Rock 72202	1974	Robert H. Langston, 520 North Spring, Harrison 72601	1974
Robert H. White, 1004 Dyer, Malvern 72104	1974	Francis Buchanan, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1975
C. Lewis Hyatt, 515 North Main, Monticello 71655	1974	Ralph Ingram, 1120 Lexington, Fort Smith 72901	1976
Donald B. Baker, 241 West Spring, Fayetteville 72701	1975		
Thomas D. Honeycutt, 4124 West 11th, Little Rock 72204	1975		

PROCEEDINGS

	Term Expires		Term Expires
SUB-COMMITTEE ON INDUSTRIAL HEALTH		Carl L. Williams, 522 South 16th, Fort Smith 72901 — <i>CHAIRMAN</i>	1976
Kemal Kutait, 1120 Lexington, Fort Smith 72901	1974	John P. Burge, 434 South Cokley, Lake Village 71653	1976
Banks Blackwell, 1726 Doctors Drive, Pine Bluff 71601	1974	SUB-COMMITTEE ON LIAISON WITH VOCATIONAL REHABILITATION	
I. Leighton Millard, P. O. Box 5270, Little Rock 72205	1975	Major E. Smith, 101 West Peddicord, Dermott 71638	1974
Howard Schwander, 1115 Bishop, Little Rock 72202 — <i>CHAIRMAN</i>	1975	Paul G. Henley, 700 West Faulkner, El Dorado 71730 — <i>CHAIRMAN</i>	1974
Paul G. Henley, 700 West Faulkner, El Dorado 71730	1976	Tom P. Coker, 1673 North College, Fayetteville 72701	1974
H. Blake Crow, 327 East 2nd, Prescott 71857	1976	Samuel B. Thompson, 5520 West Markham, Little Rock 72205	1975
COMMITTEE ON MENTAL HEALTH		Thomas M. Durlham, Jr., 505 West Grand, Hot Springs 71901	1975
Fred D. Jarvis, Jr., 1031 North College, Fayetteville 72701	1974	John P. Wood, 907 Mena, Mena 71953	1976
Donald S. Chambers, 924 Adelaide, Fort Smith 72901	1974	H. King Wade, Jr., 231 Central, Hot Springs 71901	1976
Robert G. Carnahan, 4313 West Markham, Little Rock 72205	1975	COMMITTEE ON MEDICAL EDUCATION	
W. Payton Kolb, 1120 Marshall, Little Rock 72202 — <i>CHAIRMAN</i>	1975	Winston K. Shorey, 4301 West Markham, Little Rock 72205, Dist. 8	1974
Walter R. Oglesby, 324 West Pershing, North Little Rock 72114	1975	C. Lewis Hyatt, 515 North Main, Monticello 71655, Dist. 4 — <i>CHAIRMAN</i>	1974
William O. Young, 503 Donaghey Building, Little Rock 72201	1976	Marlin B. Hoge, 314 North Greenwood, Fort Smith 72901, Dist. 10	1975
James M. Robinette, 923 Union, Jonesboro 72401	1976	Robert D. Dickens, Jr., 1026 Donaghey Building, Little Rock 72201, Dist. 8	1975
Albert Clowney, 312 Thompson, El Dorado 71730	1976	Jacob P. Ellis, 714 West Faulkner, El Dorado 71730, Dist. 5	1976
IMMUNIZATION SUB-COMMITTEE		Lee B. Parker, Jr., 241 West Spring, Fayetteville 72701, Dist. 9	1976
Howard R. Harris, 207 South Elm, Dumas 71639	1974	Claude F. Peters, 1420 Potts, Malvern 72104, Dist. 7	1974
T. E. Townsend, 1310 Cherry, Pine Bluff 71601 — <i>CHAIRMAN</i>	1975	Lynn Harris, P. O. Box 550, Hope 71801, Dist. 6	1975
Mahlon Maris, P. O. Box 759, Harrison 72601	1975	Bobby McKee, 505 East Matthews, Jonesboro 72401, Dist. 1	1976
Betty A. Lowe, 300 East Sixth, Texarkana 75501	1975	Porter Rodgers, Jr., 403 East Lincoln, Searcy 72143, Dist. 2	1974
Calvin Austin, 1210 DeQueen, Mena 71953	1975	Bernard Capes, P. O. Box 2398, West Helena 72390, Dist. 3	1976
Vida H. Gordon, 4301 West Markham, Little Rock 72205	1976	COMMITTEE ON HOSPITALS	
Charles E. Kemp, 809 Cobb, Jonesboro 72401	1976	Raymond A. Irwin, 1421 Cherry, Pine Bluff 71601	1974
SUB-COMMITTEE ON TRAFFIC SAFETY		Edgar J. Easley, 4815 West Markham, Little Rock 72205	1974
Lonnie R. Turney, 101 South Third, McGehee 71654	1974	Paul N. Means, 1120 Marshall, Little Rock 72202	1975
James G. Stuckey, Jr., 500 South University, Little Rock 72205	1975	Peter J. Irwin, 1500 Dodson, Fort Smith 72901	1975
H. Austin Grimes, P. O. Box 5270, Little Rock 72205	1975	Art B. Martin, 1500 Dodson, Fort Smith 72901 — <i>CHAIRMAN</i>	1976
Donald L. Duncan, P. O. Box 778, Texarkana 75501	1975	George K. Mitchell, P. O. Box 2181, Little Rock 72203	1976
Louise M. Henry, 204 South East Street, Fayetteville 72701	1975		

PROCEEDINGS

	Term Expires		Term Expires
COMMITTEE ON PUBLIC RELATIONS		COMMITTEE ON VETERANS ADMINISTRATION AFFAIRS	
Gordon P. Oates, 1612 Maryland, Little Rock 72202	1974	Edgar K. Clardy, P. O. Box 850, Hot Springs 71901	1974
Paul A. Wallick, Health-Education Complex, Monticello 71655	1974	Charles W. Silverblatt, 500 University Tower Bldg., Little Rock 72204	1974
A. C. Bradford, Waldron Road at Ellsworth, Fort Smith 72901 — <i>CHAIRMAN</i>	1975	Robert L. Kerr, 353 East Eighth, Mountain Home 72653	1974
W. Ray Jouett, 1026 Donaghey Building, Little Rock 72201	1975	Warren Murry, 1749 North College, Fayetteville 72701 — <i>CHAIRMAN</i>	1974
G. Thomas Jansen, 500 South University, Little Rock 72205	1976	Joseph Ledbetter, 804 South Church, Jonesboro 72401	1976
Milton D. Deneke, 300 South Rhodes, West Memphis 72301	1976		
SUB-COMMITTEE ON LIAISON WITH THE AUXILIARY		COMMITTEE ON INSURANCE	
C. C. Long, 110 West Commercial, Ozark 72949	1974	Charles F. Wilkins, 3005 West Main Place, Russellville 72801	1974
A. S. Koenig, 922 Lexington, Fort Smith 72901 — <i>CHAIRMAN</i>	1974	L. J. Pat Bell, 626 Poplar, Helena 72342	1974
Frank M. Lockwood, 1500 Dodson, Fort Smith 72901	1974	J. Harry Hayes, Jr., 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1975
Amail Chudy, 1801 Maple, North Little Rock 72114	1974	Paul H. Millar, Jr., Route 1, Box 21-D, Stuttgart 72160	1975
Gordon P. Oates, 1612 Maryland, Little Rock 72202	1974	John D. Wright, 321 Short Street, Benton 72015	1976
Charles F. Wilkins, 3005 West Main Place, Russellville 72801	1974	James R. Weber, 1410 West Main, Jacksonville 72076	1976
SUB-COMMITTEE ON STATE HEALTH AND MEDICAL RESOURCES FOR CIVIL DEFENSE		COMMITTEE ON LIAISON WITH THE NURSING PROFESSION	
Willis O. Colyar, Jr., 416 Hospital Drive, S.W., Camden 71701	1974	J. R. Pierce, Jr., 1712 West 42nd, Pine Bluff 71601	1974
Monroe D. McClain, 1419 North Hughes, Little Rock 72207	1974	Morriss Henry, P. O. Box 1225, Fayetteville 72701	1974
John W. Dorman, 1203 Sunset, Springdale 72764	1974	Robert F. McCrary, 505 West Grand, Hot Springs 71901 — <i>CHAIRMAN</i>	1975
Ralph R. Wooley, P. O. Box 7267, Pine Bluff 72601 — <i>CHAIRMAN</i>	1974	Charles E. Tommey, 412 North Washington, El Dorado 71730	1975
Edgar J. Easley, 4815 West Markham, Little Rock 72205	1974	Jerry Holton, P. O. Box 3096, Fort Smith 72901	1976
Alvin Strauss, Jr., 110 East 7th, Little Rock 72201	1975	Guy R. Farris, 6213 Lee, Little Rock 72205	1976
Hugh R. Edwards, 601 Woodruff, Searcy 72143	1976		
ADVISORY COMMITTEE TO THE MEDICAL ASSISTANTS SOCIETY		COMMITTEE ON MEDICINE AND RELIGION	
T. E. Townsend, 1310 Cherry, Pine Bluff 71601	1974	Kenneth A. Siler, 651 North Spring, Harrison 72601	1974
Hunter Sims, Jr., 525 North 10th, Blytheville 72315	1974	Fred O. Henker, 4301 West Markham, Little Rock 72205	1974
David B. Cheairs, 1624 Maryland, Little Rock 72202	1974	C. Randolph Ellis, 1004 South Main, Malvern 72104 — <i>CHAIRMAN</i>	1975
G. Grimsley Graham, 5322 West Markham, Little Rock 72205 — <i>CHAIRMAN</i>	1975	Kenneth Lilly, 1120 Lexington, Fort Smith 72901	1975
W. C. Holmes, Jr., Waldron Road at Ellsworth, Fort Smith 72901	1975	Calvin Austin, 1210 DeQueen, Mena 71953	1976
John L. Dedman, Jr., 415 Hospital Drive, S.W., Camden 71701	1975	Carl E. Wenger, 1624 Maryland, Little Rock 72202	1976
		COMMITTEE ON ARRANGEMENTS FOR ANNUAL SESSION	
		Joseph L. Rosenzweig, 236 Woodbine, Hot Springs 71901	1974

PROCEEDINGS

	Term Expires
Louis R. McFarland, 211 Hobson, Hot Springs 71901	1974
George F. Wynne, 113 West Cypress, Warren 71671	1974
Charles D. Cyphers, 519 West Faulkner, El Dorado 71730	1974
A. S. Koenig, 922 Lexington, Fort Smith 72901	1975
Dwight W. Gray, 110 West Chestnut, Marianna 72360	1975
G. Thomas Jansen, 500 South University, Little Rock 72205 — <i>CHAIRMAN</i>	1975
Winston K. Shorey, 4301 West Markham, Little Rock 72205	1976
Gilbert S. Campbell, 4301 West Markham, Little Rock 72205	1976
W. T. Dungan, 4301 West Markham, Little Rock 72205	1976

COUNCIL COMMITTEES

COMMITTEE ON CONSTITUTIONAL REVISION

Lee B. Parker, Jr., 241 West Spring,
Fayetteville 72701 — *CHAIRMAN*

J. Harry Hayes, Jr., 500 South University,
Little Rock 72205

Paul L. Rogers, P. O. Box 3096,
Fort Smith 72901

H. King Wade, Jr., 231 Central,
Hot Springs 71901

Ross E. Maynard, 303 National Building,
Pine Bluff 71601

BUDGET COMMITTEE

C. C. Long, 110 West Commercial,
Ozark 72949

H. W. Thomas, 105 North Freeman,
Dermott 71638 — *CHAIRMAN*

Ben N. Saltzman, 126 West Sixth,
Mountain Home 72653

SENIOR MEDICAL DAY COMMITTEE

Ralph A. Downs, 119 North Van Buren,
Little Rock 72205 — *CHAIRMAN*

Calvin R. Simmons, 1714 West 42nd,
Pine Bluff 71601

LIAISON COMMITTEE WITH STATE WELFARE DEPARTMENT (Composed of Executive Committee)

PHYSICIAN TO WORK WITH AMA COMMITTEE ON QUACKERY

Frank M. Burton, 101 Whittington,
Hot Springs 71901

COMMITTEE ON PHARMACY

Willie R. Harris, 520 Northeast 4th,
England 72046 — *CHAIRMAN*

Art B. Martin, 1500 Dodson,
Fort Smith 72901

ARKANSAS STATE ADVISORY COMMITTEE TO THE SELECTIVE SERVICE SYSTEM

Joseph W. Ledbetter, 804 South Church,
Jonesboro 72401

T. S. Van Duyn, P. O. Box 110,
Stuttgart 72160

Allen R. Russell, 12 Southern Pines Drive,
Pine Bluff 71601

James F. Clark, 524 West Faulkner,
El Dorado 71730

Frank M. Burton, 101 Whittington,
Hot Springs 71901

Robert A. Calcote, Donaghey Building,
Little Rock 72201

Ulys Jackson, 118 South Pine,
Harrison 72601

Friedman Sisco, P. O. Box 65,
Springdale 72764

L. A. Whittaker, Jr., 708 Lexington,
Fort Smith 72901 — *CHAIRMAN*

STUDENT AMA LIAISON COMMITTEE

Alfred Kahn, Jr., 1300 West Sixth,
Little Rock 72201 — *CHAIRMAN*

Elvin Shuffield, 1000 Wolfe,
Little Rock 72202

Thomas D. Honeycutt, 4124 West 11th,
Little Rock 72204

COMMITTEE ON EMERGENCY HEALTH SERVICES

Robert M. Bransford, 300 East Sixth,
Texarkana 75501 — *CHAIRMAN*

Ben N. Saltzman, 126 West Sixth,
Mountain Home 72653

J. Warren Murry, 1749 North College,
Fayetteville 72701

Art B. Martin, 1500 Dodson,
Fort Smith 72901

John P. Wood, 907 Mena,
Mena 71953

MEDICAL SCHOOL COMMITTEE

Ross Fowler, 217 West Stephenson,
Harrison 72601 — *CHAIRMAN*

Asa A. Crow, 320 South 10th Street,
Paragould 72450

H. W. Thomas, 105 North Freeman,
Dermott 71638

C. Lewis Hyatt, 515 North Main,
Monticello 71655

Kemal Kutait, 1120 Lexington,
Fort Smith 72901

PROFESSIONAL SERVICES
REVIEW ORGANIZATION

Term Expires	Committee Members (Name and Address)	Specialty Represented
1976 April 30	Kemal Kutait, 1120 Lexington, Fort Smith 72901	Fam. Pr.
1976	Guy U. Robinson, 207 S. Elm, Dumas 71639	Fam. Pr.
1975	Ross Fowler, 217 West Stephenson, Harrison 72601	Fam. Pr.
1976	Monroe B. Painter, 675 Lollar Lane, Fayetteville 72701	Int. Med.
1975	W. Sexton Lewis, 1120 Marshall, Little Rock 72202	Int. Med.
1974	Wright Hawkins, Waldron Road at Ellsworth, Fort Smith 72901	Surgery
1975	Henry Hollenberg, 500 South University, Little Rock 72205	Surgery
1976	C. E. Tommey, 412 North Washington, El Dorado 71730	Surgery
1974	Purcell Smith, Jr., P. O. Box 5148, Little Rock 72205	Allergy
1976	Paul Means, 1120 Marshall, Little Rock 72202	Anes.
1974	A. C. Bradford, Waldron Road at Ellsworth, Fort Smith 72901	Derm.
1974	James L. Smith, 623 Woodlane, Little Rock 72201	Oph.
1974	E. L. Milner, 500 South University, Little Rock 72205	Oto.
1975	Robert F. McCrary, 505 West Grand, Hot Springs 71901	Ob-Gyn
1976	Ray Jouette, Donaghey Building, Little Rock 72201	Neurosurgery
1976	Fred D. Jarvis, Jr., 1031 North College, Fayetteville 72701	Psychiatry
1975	Lloyd R. Warford, 6213 Lee Avenue, Little Rock 72205	Pediatrics
1974	W. J. Rhinchart, Donaghey Building, Little Rock 72201	Radiology
1975	R. A. Burger, 1700 West 13th Street, Little Rock 72201	Pathology
1975	Kenneth Jones, P. O. Box 5270, Little Rock 72205	Orthopedics
1976	Charles W. Logan, 500 South University, Little Rock 72205	Urology
—	Charles F. Wilkins, Jr., 3005 West Main Place, Russellville 72801	(Chairman)
—	John P. Wood, 907 Mena, Mena 71953	(President)
—	Ben N. Saltzman, 126 West Sixth, Mountain Home 72653	(President-elect)
—	Elvin Shuffield, 1000 Wolfe, Little Rock 72202	(Secretary)
—	C. C. Long, 110 West Commercial, Ozark 72949	(Council Chairman)

PROFESSIONAL SERVICES
REVIEW ORGANIZATION

Sub-Committee of Sub-Specialties

(Representatives on call to meet with Review Organization as needed when claims in specialty field are considered)

Sub-Committee Representative (Name and Address)	Sub-Specialty Represented
Carl L. Williams, 522 South 16th, Fort Smith 72901	Thoracic Surgery
T. J. Smith, 900 North University, Little Rock 72207	Gastroenterology
Thomas H. Allen, 413 North University, Little Rock 72205	Plastic Surgery
John C. Schultz, 900 North University, Little Rock 72207	Pulmonary Diseases
Kelsy Caplinger, III, 4001 W. Capitol, Little Rock 72205	Pediatric Allergy
W. R. Johnson, Jr., D.D.S., 404 Med. Arts Bldg., Hot Springs 71901	Oral Surgery

ARKANSAS MEDICAL SOCIETY
1973 ANNUAL SESSION
ATTENDANCE REPORT

County	No. of County Membership	Per Cent of Members Registered
Arkansas	15	13.3%
Ashley	12	8.3%
Baxter	22	18.2%
Benton	28	0
Boone	25	32.0%
Bradley	5	20.0%
Chicot	9	22.2%
Clark	12	25.0%
Cleburne	9	22.0%
Columbia	15	6.7%
Conway	7	0
Craighead-Poinsett	59	8.5%
Crawford	7	14.3%
Crittenden	17	0
Cross	7	0
Dallas	7	20.6%
Desha	5	40.0%
Drew	5	40.0%
Faulkner	12	16.6%
Franklin	5	40.0%
Garland	74	40.5%
Grant	4	25.0%
Greene-Clay	22	27.2%
Hempstead	8	50.0%
Hot Spring	11	45.4%
Howard-Pike	10	40.0%
Independence	18	16.6%
Jackson	12	8.3%

PROCEEDINGS

Jefferson	63	16	25.4%
Johnson	3	1	33.3%
Lafayette	1	0	0
Lawrence	6	2	33.3%
Lee	3	3	100.0%
Lincoln	2	0	0
Little River	3	0	0
Logan	7	1	14.3%
Lonoke	9	1	11.1%
Miller	32	7	21.8%
Mississippi	32	7	21.8%
Monroe	6	3	50.0%
Nevada	5	0	0
Ouachita	16	2	12.5%
Phillips	19	4	21.1%
Polk	5	1	20.0%
Pope-Yell	38	15	39.4%
Pulaski	541	134	24.7%
Randolph	7	0	0
Saline	23	2	8.6%
Scott	2	1	50.0%
Searcy	2	1	50.0%
Sebastian	127	29	22.8%
Sevier	11	1	9.1%
St. Francis	15	2	13.3%
Union	44	11	25.0%
Washington	89	14	15.1%
White	30	3	10.0%
Woodruff	3	0	0

MEMBER			
TOTALS	1586	355	22.3%

Non-member M.D.'s	57*
Total Physician Registration	412
Non-Physician Registration	208**
Total Registration	620

*Breakdown of Non-member M.D.'s

Interns and Residents	14
Guest Speakers	14
Out of State	13
In State	16
	57

**Breakdown of Non-Physician Registration

Commercial Exhibitors	103
Scientific Exhibitors (Non-Members)	26
Woman's Auxiliary	19
Medical Students	20
Medical Assistants, etc.	24
Others	16

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Mrs. A. S. Koenig, 1973-74 president, presiding at a session of the Auxiliary's convention.



Mrs. A. S. Koenig, Auxiliary president, visits with Dr. and Mrs. C. A. Hoffman of Huntington, West Virginia. Dr. Hoffman is president of the American Medical Association.

MRS. A. S. KOENIG
Fort Smith
1973-1974 President
WOMAN'S AUXILIARY
to the
ARKANSAS MEDICAL SOCIETY



CONVENTION REPORT
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On Sunday afternoon, April 1, 1973, a lovely reception was given by Mrs. A. S. Koenig, president-elect of the Woman's Auxiliary to the Arkansas Medical Society in the presidential suite at the Arlington Hotel in Hot Springs, honoring the 1972-73 and the 1973-74 officers and board members. All Auxiliary members were invited.

Due to the unavoidable absence of our sweet and lovely president, Mrs. W. Myers Smith, the forty-ninth Annual Session of the Woman's Auxiliary to the Arkansas Medical Society was duly opened on April 2, 1973, at Hot Springs, Arkansas, by Mrs. A. S. Koenig, president-elect. We

were privileged to have as special guests Mrs. Willard Scrivner, president-elect, Woman's Auxiliary to the American Medical Association, and Mrs. Erle E. Wilkinson, Nashville, Tennessee, president, Woman's Auxiliary to the Southern Medical Association. The AMAERF committee chairman, Mrs. Paul Cornell, reported that as of March 30, 1973, \$4,342.50 had been contributed to AMAERF from our State.

The past president's breakfast was held on Tuesday morning. This group contributed their annual donation to the AMAERF fund.

The Monday luncheon honoring Mrs. Willard Scrivner was climaxed with a delightful style show by Crown Colony of Hot Springs.

Mrs. James C. Bethel
Recording Secretary



In attendance at the annual breakfast for past presidents of the Woman's Auxiliary to the Arkansas Medical Society were (seated, left to right) Mrs. James G. Martindale, Mrs. Gordon P. Oates, Mrs. Harold Langston, Mrs. John McC. Smith, Mrs. Louis Hundley, Mrs. Mason Lawson. Standing, left to right, are: Mrs. C. W. Jones, Mrs. Paul Gray, Mrs. C. D. Burroughs, Mrs. James Branch, Mrs. Hoyt Choate, Mrs. John T. Gray, Mrs. W. S. Riley, Mrs. Lynn Harris, Mrs. Joyce Wilkins, Mrs. M. H. Wilmoth, Mrs. Frank Padberg, Mrs. A. A. Little, and Mrs. Paul Schaefer (honorary member).



Officers of the Woman's Auxiliary to the Arkansas Medical Society, left to right, Mrs. A. S. Koenig, Fort Smith, President; Mrs. George V. Roberson, Pine Bluff, President-elect; Mrs. Curry B. Bradburn, Little Rock, Treasurer; Mrs. W. A. Ross, Arkadelphia, Recording Secretary, and Mrs. Kenneth R. Duzan, El Dorado, Southwest Vice President.

Health Care Corporations**

Mr. Stephen M. Morris*

There is a general and growing realization that the health care system of this country is in need of repair, and that the next few years will be crucial ones for all providers of health care.

Health care today in America is a study in contrasts. We have great medical centers, utilizing the most advanced technology in the world, where persons can have vital organs repaired or transplanted. At the same time, there are many areas in this country where both accessibility and comprehensiveness of care are so deficient that many Americans are inadequately cared for — indeed, many die from diseases long conquered.

We live in a country where one city can boast of more neurosurgeons than the whole of the Soviet Union; yet where, in sections of that same city, some people cannot find a family physician. We live in a society where malnutrition rubs elbows with obesity; and where our knowledge of how to do things has surpassed our ability to apply solutions to human conditions.

In addition to shortcomings in accessibility and comprehensiveness of care, the rising cost of health care is creating intolerable burdens for many individuals. A major factor contributing to cost increases in the health care field is the rising price of labor. The expenditures of community hospitals for the salaries of their staffs have increased steadily throughout the last two decades and the rate of increase is rising as hospitals require larger numbers of skilled employees. The increase in hospital employment is due not only to changes in scope, quality and complexity of care, but it is also a result of the decreasing number of hours worked per employee. And there are other reasons why costs are rising, but my purpose here today is not to discuss the problem; rather, I will address myself to solutions.

The first words that come to mind when discussing possible solutions to our health care problems are "national health insurance." There was a time when they were considered dirty words, but today the Congress is flooded with national health insurance proposals and even the most conservative estimates say the United

States will have a national health program by the end of the '70's. Why the turn around? Actually, it is based on the existence of relatively recent economic and social pressures acting on a number of sectors in our society. Each of these sectors, representing the most powerful interests in the country, have joined in a coalition demanding changes in our health care system. For each of them, some sort of national health insurance is the answer.

Organized labor, recognizing the handwriting on the wall, knows that ever-increasing medical costs cannot be met indefinitely by employers without sacrificing desired pay and fringe benefit increases. Industry has just so much to give, and labor would prefer it in the form of increased take-home pay. A governmentally subsidized health program would insure this.

Management, too, is in favor of national health insurance. As its premiums for contributions to employee health care have tripled, its interest in national health insurance has quadrupled. What industry wouldn't favor a proposal that takes an ever-increasing load off its back?

The coalition we speak of also includes health and health-related institutions. Already smarting under the universal problem of rising operating costs, hospitals await a program that will help stabilize income by guaranteeing a certain level of reimbursement, a level not subject to the restrictions of Medicaid.

Perhaps the most significant contributor toward the formation of a coalition for national health insurance is the middle class consumer. He is faced with the realities of increasing costs for medical care and a stagnant paycheck. Health insurance premiums have gone up while benefits remain the same. Beyond this, he faces the all too real possibility that a single illness, not covered by insurance, will wipe out his life savings.

But the middle income consumer is concerned about more than rising costs. He has joined with the poor in denouncing the deficiencies of the delivery system itself. Adequate health care has become a scarce commodity for many consumers because of an inability to find access to the system. The consumer has trouble finding a doctor and, just as important, finding one who can be

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responsive to his needs. He decries the surplus of specialists, and the impersonal delivery of care. He finds the health care system self-serving and non-consumer oriented. Finally, he compares the national levels of morbidity and mortality with those of other countries and finds the United States seriously deficient, both in actual numbers and in proportion to national resources devoted to health care.

It was all these concerns which led the American Hospital Association and its 7,000 member institutions to recommend a broad and sweeping restructuring of the delivery and financing of health care services. The AHA believes that the response to pressures for change in the health care delivery system must be one that recognizes the interrelationships between problems and uses this as a basis on which to structure solutions. They further believe that any changes must be built on the good aspects of the system while eliminating the bad. We desire a restructuring of the system, not an up-from-the-ashes reconstruction.

Before we can do this, it is essential that a framework be established — one that states clearly and irrefutably the principles and goals of the system. From this, programs can be developed and implemented on a realistic and rational basis. The Association believes the provision of health services must be founded on the basic irreducible principle that health care is an inherent right of each individual and of all the people of the United States. The acceptance of this principle predetermines that health services must be so organized and located that they are readily accessible to all; that they are available without regard to race, creed, color, sex, age or a person's ability to pay; that they enhance the dignity of the individual and promote better community life. We further believe that it is the function of government to assure the preservation and maintenance of the health of all the people.

In its *Policy Statement on Provision of Health Services*, the American Hospital Association has outlined the goals defining what the health care system should be. They emphasize the dignity of the individual and the goal of optimum health care for every person. Specifically, the system must be health-oriented rather than sickness-oriented; it must provide the components of comprehensive care, including health mainte-

nance, primary care, specialty care, restorative care and health-related custodial care; it must provide incentives for encouraging the use of ambulatory facilities, extended care and nursing home facilities, and home care programs; it must include quality review programs, assuring the most effective and competent use of health care personnel and facilities; the system must be flexible enough to encourage innovation and preserve the benefits of alternative choice; and, finally it must provide care for persons suffering from alcoholism, drug abuse and acute mental illness.

To accomplish these goals, the Association believes that a new health care delivery concept is required. This new concept must be flexible and reflect a number of variables, including the availability and distribution of resources and geographical and environmental factors. We have called this new organizational concept the Health Care Corporation (HCC).

Briefly, the HCC is a provider organization that would synthesize health resources in a corporate structure for the purpose of providing comprehensive health care services to a defined population group. HCC's would be private or governmental not-for-profit corporations with a mandated responsibility for providing comprehensive health care to all residents with specified geographic areas. Every area of the United States would have at least one HCC and, where necessary, as many HCC's as would be needed to satisfy population needs. They would be composed of existing health care providers — doctors, hospitals, other health professionals and institutions. Each HCC would be responsible for providing the five components of comprehensive health care I mentioned earlier. These services would be available to all registered residents within the geographic area, and all residents would be encouraged to join.

Beyond having specific responsibility for quality and effective delivery of care, HCC's would engage in education, research and other activities relating to the furnishing of personal health services.

The HCC's would be approved for operation in each area by a newly-formed independent agency, the State Health Commission. This commission would answer to a National Health Board which would establish standards of quality and regulations for the scope of benefits and

comprehensiveness of services at the national level.

The financing aspect of our proposal is based on the principle that those able to pay for their own health care should do so. For the economically disadvantaged — the aged, low income and medically indigent — care would be financed through governmental resources. The HCC concept recognizes the desirability of multiple sources of financing as an incentive for quality care and a control against the possibility of benefit reductions because of governmental budget restraints. Multiple sources of HCC financing include general federal revenues for the low income and medically indigent, Social Security revenues for the aged, and payment by employees and employers through prepayment plans and private health insurance companies. For those currently without access to the benefits of group insurance — for example, the uninsurable, the self-employed and small employer groups — provision would be made for the purchase of group insurance.

Although no health delivery model could hope to cure all the ills within our present system, the HCC provides a framework through which many of these ills can be treated. In particular, the HCC concept faces the issues of accessibility; availability, and especially the maldistribution of services; and unnecessary duplication. As a synthesis of management, physicians, personnel and facilities in a single corporate structure, it has the capacity and responsibility for delivering comprehensive health care to a geographically defined community, either directly through its own facilities and services or by contract with other health care providers. It has specific responsibility for the quality and effective delivery of care by all its providers, including all those whom it would contract. Because of its legislated responsibility to make comprehensive health care available to all the people, enough HCC's would be organized to meet the needs of every geographic area and the population, regardless of geographic or political boundaries. All persons would have access to at least one Health Care Corporation.

The HCC is organized in a way that will allow services to be furnished to registrants through their own resources or through affiliations with other providers, either profit or non-profit.

Many types of organizations would be allowed and encouraged to participate with health care providers in the formation of the HCC. These could include health-oriented educational and social organizations, governmental and private organizations and organizations of health professionals, such as groups of physicians, pharmacists or nurses. However organized, the governing board could, and should, include representation of the community, consumer registrants, provider administration and physicians. This would guarantee meaningful opportunities for all registrants and affected parties to express their reactions to the quality, cost, convenience and accessibility of services.

The concept recognizes that physician participation is fundamental to an effective health care delivery organization. Therefore it assures that medical judgments related to health care would be made by or under the supervision of a physician. It also affords the opportunity for all physicians, within the limits and capacity of the organization, to affiliate with the organization and provides incentives to attract physicians to practice within them. All judgments pertaining to the practice privileges of physicians would be made after peer review of their training, experience and professional competence. The physicians' responsibilities and professional relations would be defined in accordance with rules and regulations adopted by the organization and its component institutions. Physicians practicing within the HCC would be required to participate in management by serving on committees for budget, planning, utilization, and patient care. Based upon their management qualifications, they would have the same opportunities as professional administrative personnel for upward mobility in the management structure of the organization.

The HCC assumes that every individual shares a responsibility to protect his own health and that proper discharge of the responsibility reduces the incidence of illness and injury. In order to encourage individuals to take care of themselves to the maximum extent, programs of education aimed at the exercise of this responsibility would be developed and maintained.

HCC's would also be responsible, on behalf of their registrants, for participating in community-wide educational activities sponsored by voluntary and governmental agencies and for

providing adequate information services concerning the availability and use of health services from all sources. They would have the responsibility for actively encouraging the appropriate use of services by their registrants.

Health Care Corporations, as I have defined and described them today, could well serve as a model for the ultimate restructuring of the health care system. Although HCC's, as we envision their scope and organization, are a new concept, similar organizations have and should continue to be organized. Already there exist areas in which health care institutions represent various forms of ownership. They view comprehensive care as a primary objective and some include financing mechanisms as part of the total

effort to integrate the provision of health services. These systems, and those community institutions which emphasize coordinated services, could qualify as Health Care Corporations without marked organizational change.

I greatly appreciate having had the opportunity to present the views of the nation's hospitals before a group of future physicians. I'm sure that you disagree with some of the things I said here today. I would hope that you heard other things you agree with. The important thing is that we continue our dialogue and our search for ways to solve our problems. Time is growing short and the pressures for change are too great to be ignored.



Renal Tubular Acidosis and Autoimmune Thyroid Disease

A. M. S. Mason (Clinical Research Center, London Hosp, London) and P. L. Golding
Lancet 2:1104-1106 (Nov 28) 1970

Three patients with renal tubular acidosis and autoimmune thyroid disease are described. Eight patients with myxedema and hyperglobulinemia were investigated and one was found to have an abnormal response to acid load. The identical twin of this patient was euthyroid but had immunological evidence of thyroid disease and renal tubular acidosis. Immunoglobulin and autoantibody abnormalities were detected in all five patients with both disorders. The concurrence of renal tubular acidosis and autoimmune thyroid disease is more than fortuitous, and immunological mechanisms may be involved in the pathogenesis of both disorders.

Immunoassay of Human Serum Calcitonin in Normal and Disease States

A. H. Tashjian, Jr., (Harvard School of Dentistry and Medicine, Boston 02115)
New Eng J Med 283:890-895 (Oct 22) 1970

A radioimmunoassay using ¹³¹I-labeled synthetic human calcitonin and antihuman calcitonin revealed normal basal levels of the peptide in serum of 20uug to 400uug/ml. Calcium infusion produced a two- to threefold rise in serum calcitonin in most control subjects. Chronic hypercalcemia was not regularly associated with

elevated serum calcitonin and normal calcitonin levels were found in six patients with chronic hypocalcemia. In medullary carcinoma of the thyroid, basal serum calcitonin was 1mg to 540-mug/ml. Calcitonin levels correlated with the extent of disease. In patients with medullary carcinoma, serum calcitonin responses to calcium and glucagon infusions tended to be greater than in control subjects. Results of family studies suggest that immunoassay may prove useful in the early diagnosis of this tumor among high-risk individuals. Calcitonin normally circulates in human serum; its concentration may not always correlate directly with serum calcium. Immunoassay is a useful method for measuring calcitonin in human disease.

Life Expectancy of Head-Injured Men With and Without Epilepsy

A. E. Walker et al (601 N Broadway, Baltimore 21205)
Arch Neurol 24:95-100 (Feb) 1971

On the basis of a study of Bavarian veterans of World War I, made about 50 years after wounding, the life expectancy of head-injured men, particularly those with post-traumatic epilepsy, is shorter than that of uninjured veterans and of the male German population of similar age. This disparity becomes greater after the age of 50 and at age 75 is at least 3.3 years for the head-injured and 4.9 years for the post-traumatic epileptic men.

The Task of the Second Cricket**

Henry M. Seidel, M.D.*

Thank you very much, Dr. Dennis. It's delightful to be in Little Rock! I appreciate the chance to speak and to hear and to share in the celebration of this University's Centennial, to wish you a Happy Birthday.

The time I have to share with you, I think, can best be spent with the telling of some of our experiences in developing the Columbia Medical Plan as a joint program of the Johns Hopkins Medical Institutions and the Connecticut General Life Insurance Company.

The information I have to give reminds me of the Fable of the Two Crickets. They were friends. They had frequent conversations together. One day, Cricket Number One said to Cricket Number Two, "Let's be butterflies!" Cricket Number Two responded with enthusiasm, "That's great! How do we do it?" Whereupon, Cricket Number One stretched out to his full length, and said, "I'm the idea man here, you work out the details!"

Well, we in the Columbia Medical Plan have been working out the details for quite some time now. It has been a period of many pleasures and many problems. Now, some two years and five months after the beginning of our Program, we can quite honestly say we are delighted to be in Columbia.

Still, it is appropriate to put the question—why should a university become involved in Primary Medical Care and Health Maintenance, areas of health provision where the academic has not previously been prominent.

I am familiar with many of the lists of reasons. All of the issues my colleagues here have cited.

And, also, we need new teaching laboratories, with appropriate quality control, community and family-centered, in middle class areas. We must explore the potential contribution of Allied Health Workers. We need areas for evaluative research in medical care delivery. We need the resource of controlled populations for clinical research.

Well, just about ten years ago, Mr. James Rouse, a successful mortgage banker and shopping center developer, a man, it must be said,

with vision and a commitment which is thoroughly captivating, decided to build a new city. He settled on an area in Howard County, roughly half-way between Baltimore and Washington. Howard County at that time had a population of about 30,000—its area about 300 square miles. It was rural, it was well-to-do. In 150 separate, secret transactions, Mr. Rouse bought up an area the size of Manhattan Island at something under \$2,000 an acre. When these transactions had been completed, he triggered his surprise. He was going to build a new city!

Now, there are certain conditions which Mr. Rouse believes necessary to develop a new city in an economic system such as ours. He makes no bones about saying there must be profit. But, he also says that a new city must have a congenial living base for people of varying social and economic backgrounds, must have jobs available within the city for those people and must have the services and resources necessary for city living.

One of these necessary services and resources is health service. Howard County had barely a dozen practitioners of medicine—hardworking men, all of whom had opted for the rural life. Howard County had no hospital. Yet, by 1980-1981, Mr. Rouse proposed to have 100,000 or more new citizens living in the City of Columbia alone, let alone the other areas of the County. He explored with Dr. Russell Nelson, the President of the Johns Hopkins Hospital, the possibility of coming out to Columbia. There was considerable appeal in this concept amongst the leaders of the Medical Institutions at that time, Dr. Nelson, Dr. Thomas Turner, the Dean, Dr. Milton Eisenhower, the President of the University.

However, the faculty had to be approached and their response was vigorous and varied. There were those who envisioned any effort on our part in Columbia as a kind of political radicalism which had no role in medicine. There were others who felt that our mission was in the so-called secondary and tertiary areas of medical care, not in the primary areas. There were others who could not conceive what we might do and objected to the notion of their having to spend a half-day a week 20 miles from home

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base. There were, I'm glad to say, a considerable number who pointed out that it was inappropriate to become involved in a new community, middle-class, potentially quite affluent, when we had served in a less than optimal way the socially and economically deprived community of East Baltimore. There were others who also pointed out the need to correct significant deficiencies in the University Health Service and in the Hospital Outpatient Departments where 135 clinics were functioning in some 35 or 40 locations in 8 different buildings. There were many who believed that it was appropriate to become involved.

The argument raged! In the long run, the decision was made to commit ourselves to this effort — but, at the same time, through a mechanism called the Office of Health Care Programs, to commit ourselves to equal efforts in East Baltimore, in University Health, in the Outpatient Department, and, most importantly and significantly, to a research, development and evaluation effort which had not previously been prominent in medical care delivery. To ask the question of what our objectives might be, to establish criteria for measuring those objectives and to indeed collect the data those criteria indicated. Are we getting to where we intended to go? Medicine has not often done this in the past in appropriate ways.

The commitment was made. I've had a lot of opportunity to think about these issues. Ten years ago, I was practicing Pediatrics in Baltimore. I was and had been a part-time member of the medical school faculty. I had been a peripheral observer. It was only after the decision had been made by the University that I began to question whether it was appropriate.

Well, indeed, if not those of us in the medical schools, then who?

There is no question that the Flexnerian approach must be the base of education — but also that it is an anachronism as it is now implemented in the *applied* aspects of the health services. Reordered educational and training approaches can only find implementation in the university, in the schools of medicine. It is no secret that there is some question about the appropriateness of the education of the physician today. Is his experience in school and in the post-doctoral period suited to the demands of the practical care of people? Is there need for

a change? Obviously, these are issues which must be explored. If the end product of our medical education is to change, that part of the educational process which prepares for that product must be related to that change. We have indeed dallied long enough over the process of curriculum without ever defining accurately what we desire as the outcome of that curriculum. We sit down to restructure hours and argue about bits and pieces of time in 1972 for a physician who will not become functional in society until a decade hence. Well, society and it's about time is beginning to take interest and is demanding a hard look.

Therefore, I do agree that we do indeed need teaching laboratories of a different kind than we now have clinically. The traditional university hospital outpatient department is not an adequate area in which to acquaint the medical student with many aspects of the practice of medicine. The physician's office as he now practices is one resource, and, in our Columbia Medical Plan, we have as a hypothesis another resource — and we are exploring it.

I must say, it's a little difficult to set objectives when we are aware that society is changing its concept of the role and manner of the practice of medicine. To set these objectives before society has made its decision may be difficult, but it is exciting to contemplate the notion that such an effort may help in the decision-making process. The physician, if he is to serve people in the prime interface of the individual with the health-care community, needs, as an option in his experience, a laboratory like Columbia. It is one mechanism. There is room for much other effort.

Currently, Columbia has a population of almost 18,000. The rest of Howard County has 40,000. Our Plan Membership is about 11,000. We are available to the people of Howard County. We have many of the attributes of a Health Maintenance Organization. We are privately financed, pre-paid, comprehensive, preventive. We are doing multiple kinds of research. We are teaching students in significant ways. There are many lovely statistics and achievements I can cite for you. Those, let's leave for another time.

We still have many issues to address. What are they?

(1) The philosophic argument has been pretty well handled within our Institution. There are still pockets of resistance, but we are committed. However, those pockets of resistance do sap emotional energy. More importantly, there is, with the established medical community, enough conceptual disagreement so that relationships overall are less than totally congenial. We've come a long way after a considerable amount of effort. We still have the need to work out for the people of Howard County the best way to build hospital services to meet the overall needs of the County. As a medical institution which has not been previously significantly involved in its immediate community we pose a threat and we have to overcome a past history of viewing the world in terms of the pejorative initials, L.M.D. — a past history which requires a lot of doing in order to achieve credibility now.

(2) Within an academic institution the primary care program must struggle to overcome the initial handicap of the label of secondclassness. It must be anticipated; it must be worked out from the beginning. And, I think we've won this battle. We've done it in terms of recruitment and the absolute requirement that all full-time physicians in the Columbia Program must be acceptable to the relevant department or division chairman for a fulltime academic appointment. A system of checks and balances, this provides the base on which we establish respectability within our own house.

(3) One of our objectives is teaching, and we do teach. But, in fact, how much can we without some source of funding? Teaching takes time. Time is money. Our money comes from our patients. To what extent do they want their dollars to be expended in the teaching effort. Not with enthusiasm. And, they are rightly tentative about that. You know, in a large teaching hospital, the costs of post-doctoral education are diffused in so many ways that the question has never come to significant societal scrutiny. In a small program like ours, where all service funds are private, and when the patient has access to all financial information, teaching costs can't, mustn't and shouldn't be hidden. If, indeed, we are to be a viable teaching program there must be developed significant financial resources from other than the patient's pocket. Planners *must* consider this carefully.

(4) How to work out the availability of an

essentially middle class plan for medical care. There are so many people who do not choose a prepaid system either because they cannot afford it or because they *feel* they cannot afford it. This indicates an educational task and serious work with the overall community about appropriate mechanisms for financing medical care. It points up the very crucial point that for all people at most income levels the financing of medical care in all of today's models is an enormous continuing issue.

(5) There's a real need to learn to listen to and to work with the patient in arriving at decisions regarding medical care delivery. We work with a Member Advisory Council. The insurance companies must also learn to listen to the patient and to involve them in decisions. I give absolute philosophic commitment to this point. Let me say, however, that in a roomful of articulate people, many of them working in the Department of Health, Education and Welfare, or at the Social Security Administration, or in Housing and Urban Development, I can easily *feel* threatened! Another point, the patient also has the responsibility to learn how to participate in this dialogue well.

(6) The issue of the cost of the physician. I don't need to point out what our plans indicate quite often. There are some medical specialties in which incomes are of a different and much larger order than others. How, in a prepaid system, can this be reconciled?

(7) The resolution of problems created by the expectations of patients. This is frequently based on invalid health advertising, the past overselling of medicine. There are so many words that gain currency — comprehensive, preventive, quality, multi-phasic, continuity of care, annual checkup. These are words which have not been clearly defined either by medicine or by society. Until they are, each patient is going to render unto the system his own definition and is going to thereby complicate it. It may be that in any given area different definitions will prevail, but both the recipient of care and the health provider in each area must come to grips with definitions early. Each must clearly understand the other. It's possible for us to strangle on contemporary medical rhetoric!

(8) The growing use of Allied Health Workers. Medical Practices Acts do not necessarily permit them in a legal sense. There has to be

legal and educational effort surrounding the appropriate use of Allied Health Workers. Teaching programs. Credentials. Upward mobility. All relevant to their roles. Currently, in our program, 30 percent of all our visits are to persons other than a physician — from ex-Corpsmen to our Nurse-Midwife. She has already delivered 18 women in the short time she's been with us.

(9) The question of the right of the insurance company to let the public know about its involvement, and the possible conflict here with medical ethics and the prohibition of advertising. This issue has been settled in different ways in different places. We have arrived at a definition of advertising which is congenial to our State Medical Society, to the insurance companies, and to ourselves. It is important to note, however, that the same fight was fought in another state with another group, 30 years ago. You'll find that there is so much in all of this of the rediscovery of the wheel.

(10) The issue of the patient's adaptability to change. Here, the patient, oversold on the past of medicine and as much a prisoner of past assumptions as all of us, has to begin to look at the exploration of new concepts with the physician — among others, the concepts of Allied Health Workers, pre-payment and teaching in a socio-economic setting which has not previously been adequately used for this purpose. Our approaches have been well received by our patients. Remember, however, that we have attracted only about 45% of Columbia's population. Our attitudinal surveys indicate that this is the group that feels comfortable working with a closed panel of physicians and which articulates more than most of its current disenchantment with medicine as it has been. Allied Health Workers are well accepted; our students eagerly approached.

(11) The issue of the structure of a post-doctoral program. The intern may no longer be relevant. The question as to whether residents are, in fact, servants or students has not been appropriately answered. In one negotiation in New York City, they were able to agree on a time allocation — 82% of the time, servant; 18% of the time, student. Is this as it should be? When we have our hospital, which will be ready a year from now, a limited care facility, should we have interns in the traditional sense? Should we employ Allied Health Workers, edu-

cated for the task of the intern? Who will be the interface with the hospitalized patient? Who will be the buffer for the senior faculty?

(12) The issue of who, in the long run, should provide primary care. Should there be a modern-day version of the family doctor? Or a primary care advocate? Or an allied health person of some, as yet undefined, scope and certification? This issue has been contested legally, socially, and educationally — both rationally and emotionally.

(13) There is, in addition, an underlying concern which permeates all of the efforts at change. We are a secular society. The physician in our society has been ritualized in many ways — the process of application and acceptance by the medical school — the academic structure — the social and economic advantage. How much do we need the physician to be a religious figure? We don't know yet. But it had better play a role in our thinking if we intend to study change.

This is an interesting phenomenon itself within the university — this study of change. Until now the highest status in academia and the designation of quality and first-classness has been most easily given to that research which can control the greatest number of its variables. The more variables, the less control over variables, and, therefore, the "dirtier" the research. Hence, the less status. In the past, in short, biochemical research has preceded evaluative research of medical care delivery systems in the pecking orders in academic institutions.

Now, we go a step further, and in questioning the validity of some aspects of current medical education, we make the suggestion that in some ways the L.M.D. must be brought into the teaching center and the teaching setting in viable ways.

This is necessary, because with the imperative to study primary care, there comes the imperative to develop and add new faculty. Where, indeed, is the recruiting base for that faculty to be? The university needs a teacher with a different kind of expertise, and a classroom in which that teacher can function. Excellence and quality can achieve new heights in their definitions if, in fact, the teaching institution and the expertise which has not been appropriately utilized in the past are blended in a common effort with common objectives.

But, one must beware. Dr. Edward Pellegrino,

at Stoneybrook, warns that this may sound too much like a "salvation theme", and we have had these in the past. Considering the internal politics of many academic institutions, the effort can founder on this fear and on the question of who should implement any commitment. Should there be a Department of Community or Family Medicine? How, indeed, can such a new department develop clout in an old institution? Actually, this must be anticipated. In each institution choosing to go this way, there must be a mechanism which will allow the effort to grow without an unusual number of political constraints. Health Maintenance, this whole new exploration, is not an ideology and must not become a cult. It must be given a place in the academic institution which will allow the intellectual and emotional energies of its workers to be spent in positive directions, directions of intellectual query, and not defensive reaction.

We've won that battle in our Institution. We have a sound base on which to work. We are impressed that we must think with clarity about outcomes, about ends to be achieved. We are aware of the entrapment of arguments regarding process.

In the effort to think about these issues and discuss them widely within the University there has been occasional rancor, but little as compared to constructive discussion and thought.

We now have students in our project in Columbia in many ways. One hundred percent of our medical students get two or three significant exposures to us in two required courses. Ten percent of our students get an in-depth exposure in a number of elective opportunities. We have two post-doctoral students funded from outside the program, one in Psychiatry and one in Preventive Medicine. We are planning a post-doctoral program which will be implemented at the time our limited care facility opens.

We have commitments for September of this year to work with the Associate in Arts Degree in the innovative Nursing Program at the Howard Community College. We are members of the Advisory Committee for that Program.

We have commitment to the new Health Sciences School at the Johns Hopkins University, a school in which Allied Health Persons and Nurses will find educational bases.

We currently function as a field experience in Health Careers for the Howard County Voca-

tional High School and will do so in Medical Technology for the Catonsville Community College.

We have Tutorials in Health Care for a few students in our undergraduate school and a private high school in Baltimore.

We run courses for our health associates on-the-job to implement our programs. These are done with the enormous help of the Research and Development division of the Office of Health Care Programs.

And, we are, of course, students ourselves — involved in the Plan and a dozen different research efforts.

And, we are just beginning to scratch the surface.

Now we are also at the point where the critical mass of this effort demands definitive answer to the question of funds. We can go farther only with funding from resources other than our patient's pockets. Fortunately, we work with a Member Advisory Council which serves as a discussion point for many of these issues. We do not function optimally with them, but as the effort is made on all our parts to learn, they help in such decisions. The issue, I must repeat, goes beyond our small program. If there is to be effective change in medical care delivery systems, there must be participation of society at large in ordering the change. This participation must include funds and society must decide whether or not it chooses to underwrite in full or partial measure the health education of its health servants. We can no longer hide such costs in diffuse and cloudy ways. It's been hidden too long in the wrong line items in the wrong people's budgets. We can no longer ask that the student support entirely the cost of his education or medicine will once again become what H. L. Mencken described as a "rich man's sport". The University must participate, but it must have the assurance of the support of the public in both philosophic and tangible terms. This implies, of course, that it must participate with the public in the discussions and the decision-making process regarding these issues.

Which brings us to an important point. I have made some reference to the need for setting objectives and evaluating what it is we do. This involves an evaluative research process. That is a scientific process. It demands hypothesis, protocols, suitable collection of data, hopefully, cor-

rect questions asked and, hopefully, sound answers. This takes a long time. The nature of a substantive evaluative research is such that it takes a very long time. And there are so many questions to explore. If, then, there is to be change and a study of change within the constraints currently being imposed by the world around us, it may well be that we will have to

make decisions without hard data; hopefully, these will be rational decisions implying better options than we currently have. We can do this only if we recognize the need for new rules in discussion and decision-making in the health care process.

We've got the task of the Second Cricket!

Thank you very much.



Emphysema and Pneumoconiosis

P. Gross (Industrial Health Foundation, Inc, Pittsburgh 15232), J. Tuma, and R. T. deTreville

Arch Environ Health 22:194-199 (Feb) 1971

Pulmonary burdens of quartz dust and bituminous coal dust, respectively, were imposed upon rats and hamsters by inhalation and intratracheal injection before and after production of papain-induced emphysema. Quantitation was performed of the pulmonary content of silica, hydroxyproline, and lipids of the animals burdened with quartz dust and of the pulmonary dust content only of the animals burdened with coal dust. There were statistically significant reductions in mean silica content as well as of mean coal dust content of emphysematous lungs in all four groups of hamsters. Whereas the mean pulmonary dust content was lower in emphysematous rats than in emphysematous controls, this difference was statistically significant in only two of the four groups. Improved dust clearance is believed to be a major factor in the reduction of dust content of emphysematous lungs.

cells or occurrence of lymphocytoid plasma cells and immunologic type of myeloma or other paraproteinemia was encountered. Similarly, no correlation between clinical stage of the disorder, ie asymptomatic, incipient, or advanced, and cell type was observed. On the other hand, a rare plasma cell with Russell bodies was encountered in the marrow specimen from only one patient who had Bence Jones proteinuria. The presence of Russell bodies in cells from patients who had paraproteinemias without such proteinuria suggests that in the latter the bodies may represent stored or accumulated light chains which are not being utilized in the biosynthesis of the complete globulin molecule. No unusual cytoplasmic inclusions were found in the cells from patients with paraproteinemia. Cytoplasmic particles which resembled virus-like structures, found in cells from some patients with light chain disease and myeloma, appear most likely to represent incipient or early stages in the development of Russell bodies. Intranuclear inclusions observed in some plasma cells from these patients resulted from entrapment of cytoplasm within nuclear folds.

Ultrastructural Features of Plasma Cells in Patients With Paraproteinemias

E. R. Fisher (Shadyside Hosp, Pittsburg 15240) and Z. A. Zawadzki

Amer J Clin Path 54:779-789 (Dec) 1970

Bone marrow biopsies from 42 patients representing a variety of paraproteinemias including plasma cell myeloma, heavy chain disease, light chain disease, Waldenström's macroglobulinemia, and primary amyloidosis were examined by electron microscopy. No consistent association between the various morphologic types of plasma

Ketamine as an Induction Agent in Anesthetics

J. W. Dundee et al (Institute of Clinical Science, Belfast, North Ireland)

Ketamine was used in over 450 anesthetic inductions, including minor and major gynecological procedures and minor pediatric cases. Side effects were a problem, and a rise in systolic blood pressure, increased pulse rate, and emergence excitement, although lessened by certain forms of premedication, could not be wholly avoided at doses of 2 mg/kg/body weight.

Health Manpower; a State and Community Problem**

Address by Harold Margulies, M.D.*

We have limited tools available to us as we struggle to solve major social issues. When problems appear formidable we tend to abandon even those limited tools, perhaps with the quixotic assumption that what is unfamiliar would be approached by unfamiliar paths. The result is predictable—quick progression from confusion to chaos followed by a sudden retreat to comfortable simplisms. Thus, a complex, frustrating health delivery system is subject to multiple analyses with no visible outcome after which the solution becomes the re-creation of the “good old family doctor,” or more research or better technology or more health insurance.

There are a few basic health delivery concepts which are all but self evident. Everyone should receive adequate medical care. Because that care is a personal service it requires manpower and because those providing care need certain skills they must be trained.

When the demands for services exceed the supply there must then be equitable rationing to assure maximum public benefits with minimum risks. Public institutions are by definition constrained to meet public needs. Private providers are relatively free to respond to market demands with no more than a moral commitment to the welfare of the community. Government intrusions into the medical delivery system represent public interests but provide no guarantee that the private system will act in consonance with public policy.

Government expenditures should be managed prudently to assure benefits proportional to investments. When government pays for services it must have evidence that the services have been satisfactorily provided. When it buys a product it must make sure that the product obtained is the proper one, meeting the buyer's specifications, serving the public interest.

Both Federal and State governments pay for training of health manpower. They act primarily through intermediary institutions which have collateral sources of support and internal institutional goals. Government has only minimal control over the quantity, type of training,

distribution, or utilization of medical manpower. The present arrangement has contributed to ineffective rationing of health services despite a progressive lowering of barriers caused by inability of the poor to purchase medical care.

Rectification of existing inequities rests in part upon the identification of valid community health priorities and the establishment of mechanisms to match resources with demands to meet those priorities.

Medical manpower is a delivery conduit not an end in itself. Where there is no need for medical attention there is no need for a physician, a nurse, a hospital, a prescription. When a specific need for medical care arises it may be met in a variety of ways but in practice the service provided depends more on who or what is available than on what is needed. Rational matching of skills to individual requirements is virtually nonexistent at the point of entry into the health care system; initial decisions are made by the patient, a druggist, a physician, a nurse, a receptionist, a technician, an orderly. With the exception of overtly life-threatening emergencies each demand for professional attention has equal claim for professional time. Those who are lucky or experienced get prompt care from a physician, the rest wait, get other help, delayed help, or no help.

These familiar inequities would be acceptable if medical care was not a basic right, an essential element for survival and for a decent life. They would be more tolerable if there was no recourse—in Ethiopia or Bangladesh poor medical care is another tragic aspect of an impoverished society. Americans are convinced they would be better served if our health system was somehow rearranged, more efficiently managed. There is little reason to be optimistic if improvements are incomplete as they have been in the past, particularly if they fail to address the fundamental deficiencies in our system and in its institutions.

It seems sensible to seek relief by training more skilled people. The practical difficulties involved in this solution are illustrated by the efforts made by the State of Arkansas to provide better care for its residents by educating more medical students at the University.

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**Presented at the University of Arkansas School of Medicine Centennial Symposium, Little Rock, March 17, 1972.

By 1967 the University of Arkansas School of Medicine had granted 2,825 degrees and had 2,507 living graduates. Of these, 1,090 (43.5%) were located in Arkansas. This level of retention seems quite constant, the same percentage of graduates from 1950 on have remained in the State. The following summary demonstrates the donor nature of Arkansas relative to other states.

University of Arkansas Graduates in other States			Graduates of other States in Arkansas		
Missouri	94	vs	53	(both public & private schools)	
California	124	vs	10	(both public & private schools)	
Florida	64	vs	1	U. Miami, U. Florida	
Alabama	54	vs	6		
Texas	266	vs	37	public & private schools	
Tennessee	72	vs	178	U. Tenn., Vanderbilt, Meharry	

With the exception of Tennessee, the State of Arkansas is a contributor to these and many other states. Since 1950, as the annual output of physicians from the University of Arkansas has increased, the benefits of two-way migration with Tennessee favoring Arkansas declined from 1:2.5 to 1:1.8, reaching parity (1:1) since 1960.* This

**Editor's Note:* During the interval 1961-1971, of the 270 physicians who established practices, 64% have settled within Arkansas. Thus the migration ratio is 1.8:1 in favor of our state on a national level.

is a national phenomenon suggesting that increasing numbers of State residents in the medical school yields a disappointing increase in permanent physician manpower, in part representing those who would have studied elsewhere and returned. Some of the increased retention is consumed by additions to the faculty.

Arkansas invests heavily to increase its physician supply. With the exception of two extraordinary situations (Utah and Vermont), Arkansas exceeds all other states in the amount spent on medical education per \$100,000 of personal income. Some comparisons will emphasize how costly this is.

State	\$/100,000 p.i. to Operate Medical Schools	% retention Of Graduates
Arkansas	\$482	45%
California	238	80%
Texas	304	73%

Of all U. S. medical school graduates, those who received their degree from the University of Arkansas most prefer rural settings, yet 65% are located in large urban centers (the comparable national figure is 83%). None of this is surprising. Physicians are a national resource, highly mobile, influenced by professional, family, and personal preferences in the selection of a permanent location. To a lesser extent these factors affect the distribution of other health professionals. The most constant factor is the rate of population growth, between states and within states.

Where does this leave the residents of Arkansas? They cannot compete with rapidly growing states like California or Texas. Arkansas is not urbanized like the northeast area of the country, it is not high among the states in per capita income. It cannot compel its residents to remain or force others to come to its help; it might require its graduates to stay in selected communities for a prescribed time bargaining for transient, spotty relief despite abundant evidence against the effectiveness of such an arrangement.

Answers will not be found in the stale conventions of our times. When institutions are faltering or failing there is need for reform. Every element of the medical care system is subject to painstaking scrutiny, evaluated against an equally penetrating analysis of medical service needs. The State can elicit from its citizens a declaration of priorities which should govern the use of its medical resources. Choices can be made which exclude the trivial, the rare, the excessively costly; that which is beneficial can be chosen over that which is not, that which is disabling can be treated rather than that which is merely inconvenient. Ailments may be classified objectively according to the valid needs for hospitalization, emergency care, ambulatory treatment, or self management. All of this can be keyed around what services are required, not on what a physician or a nurse can do. Working from objectives to methods can lead to a display of requirements and from there to a determination of how the requirements will be met.

The process of rationing services can be established without waiting for a total identification of priorities. Thoughtfully done, with maximal community expression, the means for providing services can be developed. These will address all the available tools separately and

together — transportation, communication, public education, manpower, and the institutional devices through which these are applied. Manpower utilization can balance simpler needs against simpler skills, more complex problems against higher skills.

To translate these general goals into a plan of action demands the use of other, familiar tools. The focus of effectiveness is in the community — it contains the best possible combination of immediate knowledge and concern for its own welfare. The supporting instruments of change are the key health service institutions which can enhance or frustrate by their flexibility or their rigidity. The critical core of responsibility is

made up of the educational centers which train manpower, the hospitals and other facilities which provide care, and the providers of medical care.

Any extension of these comments would embrace a wide range of issues better suited to other members of this symposium or, indeed to several other symposia. What remains in the present context is a view of Arkansas, its problems, and the changing responsibilities of its institutions. Even as we celebrate the University's first hundred years the State must urgently turn to the tasks at hand, deciding now the role of this great medical center.



**Lithogenic Bile Among Young Indian Women:
Lithogenic Potential Decreased With
Chenodesoxycholic Acid**

J. L. Thistle and L. J. Schoenfeld (Mayo Clinic, Rochester, Minnesota 55901)

New Eng J Med 284:177-180 (Jan 28) 1971

Chippewa Indian women have a high prevalence of symptomatic gallstones. The aims of this investigation were (1) to determine if lithogenic bile, characterized by a low ratio of bile acids plus lecithin to cholesterol, is present among young Indian women without gallstones and if so, (2) if this lithogenic potential can be decreased by administering chenodesoxycholic acid. Duodenal bile was obtained using a double-lumen tube and cholecystokinin stimulation of gallbladder contraction. The ratio of bile acid plus lecithin to cholesterol in 12 young Indian women without gallstones was significantly lower (9.4 ± 0.82 SE) than that of white controls (16.4 ± 1.0 SE) ($P < 0.001$) and Indian men (14.8 ± 2.2 SE) ($P < 0.02$), and not different from that reported for white women with gallstones (11.3 ± 1.3 SE). Dietary habits in this group did not differ from those of matched Caucasians. Administering chenodesoxycholic acid resulted in a bile acid composition of 95% chenodesoxycholic acid and significantly increased the ratio of bile acid plus lecithin to cholesterol (14.2 ± 1.9 SE) without adverse reactions. These observations suggest that lithogenic bile precedes gall-

stone formation in Chippewa women and that administration of chenodesoxycholic acid decreases this lithogenic potential.

**Source of Abnormal Bile in Patients With
Cholesterol Gallstones**

D. M. Small and S. Rapo (Boston Univ School of Medicine, Boston)

New Eng J Med 283:53-57 (July 9) 1970

Cholesterol gallstones are formed when excess cholesterol precipitates from bile supersaturated with cholesterol. Either the gallbladder, by alteration of the composition of normal hepatic bile, or the liver production of an abnormal bile, could be the source of the bile supersaturated by cholesterol. Since cholesterol gallstones are prevalent among American Indians of the Southwest, the authors analyzed their gallbladder and hepatic bile to determine which organ is responsible for the disease. The composition of the liquid phase of gallbladder bile indicated that it was saturated with cholesterol while the composition and physical state of hepatic bile indicated that it was a liquid highly supersaturated with cholesterol. These findings suggest that in patients with cholesterol gallstones the liver secretes a bile supersaturated with cholesterol which precipitates its excess cholesterol in the gallbladder where this substance contributes to the production and continued growth of stones.

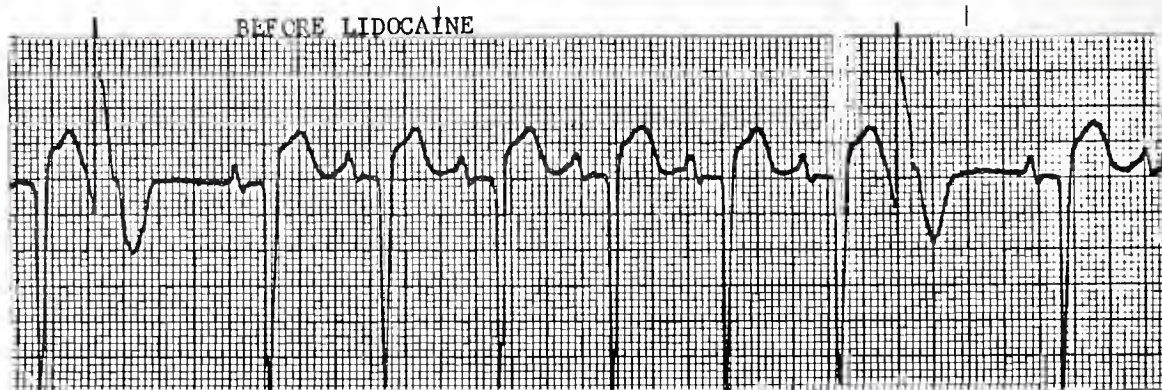
ELECTROCARDIOGRAM



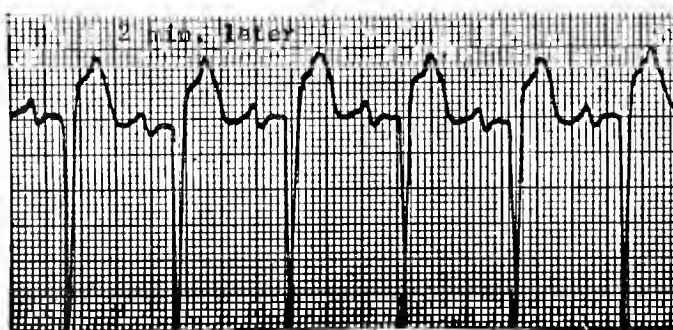
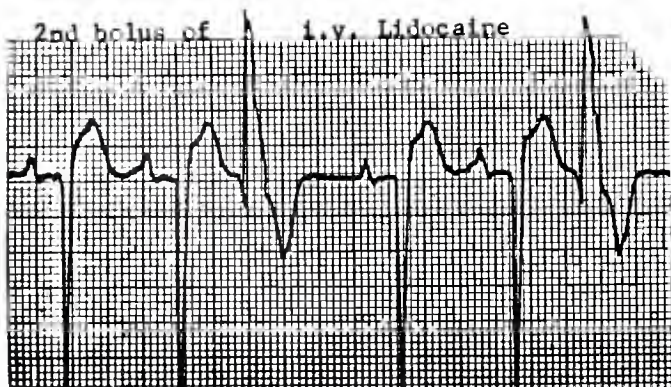
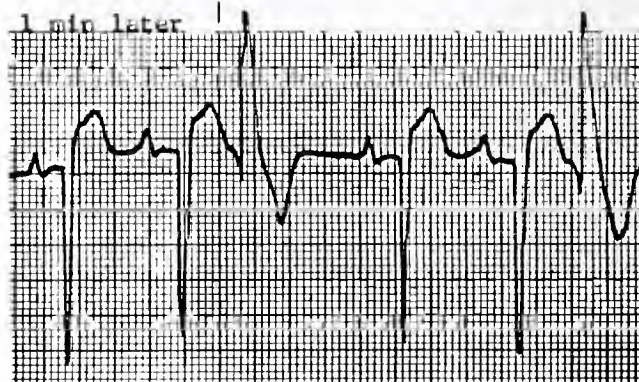
OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 59)



during infusion of 50 mgm Lidocaine i.v.



J. Douglas

72-year-old white male with severe aortic stenosis and angina . . . rhythm strips from CCU.

John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
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Salmonellosis

Robert T. Howell, Dr. P. H.*

Salmonellosis is a widespread infectious disease of man and animals in Arkansas and is probably one of the most important communicable disease problems in the United States today. There are an estimated two million human cases annually in the United States, although the true magnitude of the problem is not known since reporting is sporadic.¹ In Arkansas 150, 274 and 485 cases were reported in fiscal year 1970, 1971 and 1972, respectively.

The disease is caused by one of the three species of the genus, *Salmonella*. Salmonellae are members of the Enterobacteriaceae and are characterized in the laboratory as Gram-negative bacilli that fail to ferment lactose, sucrose, salicin, and raffinose; by their ability to decarboxylate lysine, arginine, and ornithine; and their failure to produce urease, liquefy gelatin, produce indol, or utilize malonate. Further differentiation can be made on the basis of somatic and flagellar antigens.

Three major divisions of the salmonellae can be made on the basis of host preference and clinical manifestations. The first of these groups is strictly adapted to man, such as *S. typhi* and *S. enteritidis* serotypes Paratyphi A, Paratyphi C and Sendai.¹ They are not known to have secondary hosts and tend to produce the enteric fever (septicemia) type of disease typified by typhoid fever. A small inoculum can produce disease, the incubation time is prolonged and there is a tendency to produce temporary and long-term or permanent carriers.

The second group of salmonellae are those adapted to other animal hosts. Example of this group are *S. cholerae-suis*, whose natural host is the hog and *S. enteritidis* ser Dublin, which is hosted by cattle. When man is infected by mem-

bers of this group, usually a severe illness follows, with blood stream invasion, localized abscesses and a relatively high mortality rate.

The third group, not particularly host adapted, produce disease characterized by gastroenteritis, short incubation time and usually requiring a large inoculum. The carrier state is seldom permanent, although shorter periods are not uncommon. This group can be isolated from a wide variety of wild and domestic animals, birds and insects.

Although there are over 1,300 serotypes included in the unadapted group of salmonellae, most cases of disease reported, as high as 95 percent, are associated with some 25 of these serotypes. Table I gives the number of isolations of each serotype in the Division of Public Health Laboratories during fiscal years 1970, 1971 and 1972. In the United States, and worldwide, *S. enteritidis* ser Typhimurium leads the list of organisms most frequently isolated. In Arkansas, in 1970 and 1971 *S. enteritidis* ser Newport has been isolated most frequently, followed by Typhimurium.

During fiscal year 1972 there were several major outbreaks of Salmonellosis. These included an outbreak associated with food service in a nursing home which resulted in 23 cases and 50 isolations of *S. enteritidis* ser New Brunswick; a family outbreak of *S. enteritidis* ser Typhimurium var. Copenhagen contracted through use of uncooked egg in the preparation of home-made ice cream; a restaurant-associated outbreak of *S. enteritidis* ser Agona. This was the first appearance of *S. Agona* in Arkansas which is now believed to have been caused by contaminated fish protein meal fed to chickens which were served in the restaurant with subsequent infection of the food handlers.

*Director, Division of Public Health Laboratories, Arkansas State Department of Health, Little Rock, Arkansas 72201.

These increases reflect the increased incidence of the disease plus intensified investigation and case reporting by Health Department personnel and physicians.

The reservoir for salmonellae are domestic and wild animals, pets and man, both patients and convalescent carriers.² Transmission is by ingestion of the organisms in foods contaminated by the feces of man or animals such as eggs and egg products, meat and meat products and poultry, particularly when cooked lightly before consumption. Some cases may be by direct contact with an infective person or animal or by contact with surfaces contaminated by them. Contaminated water or contact with sewage may lead to infection. Many children are infected through contact with pet reptiles and amphibians, especially turtles. As widespread as the salmonellae are, found in nature, it seems unlikely that this disease can be eradicated in the foreseeable fu-

ture. Improved water treatment systems and sanitary sewage and solid waste disposal systems have had their effect on the prevalence of typhoid and paratyphoid fevers; that plus an effective carrier surveillance system has reduced those diseases considerably. Control of the unadapted (gastroenteritis) salmonellae must be through persistent improvements and efforts in 1) elimination of reservoirs of infection in man, his pets and domestic animals, 2) protection of the food cycles of man and his animals, and 3) constant epidemiological surveillance of cases and carriers of the infection.

The National Conference on Food Protection held in Denver, Colorado, April 1971, examined many of the approaches necessary for the protection of the food supply against *Salmonella* and other organisms. Some of these included the institution of practices to control the contamination and development of the salmonellae in

TABLE I.
FREQUENCY OF ISOLATION OR SALMONELLEAE SPECIES AND SEROTYPES AT THE DIVISION OF PUBLIC HEALTH LABORATORIES DURING FISCAL YEARS 1970, 1971 AND 1972.

<i>Salmonella</i> Isolated	FY 1970	FY 1971	FY 1972	<i>Salmonella</i> Isolated	FY 1970	FY 1971	FY 1972
<i>Salmonella typhi</i>	15	40	51	Blockley	0	13	3
<i>Salmonella chloerae-suis</i>	0	0	0	Muenchen	0	2	5
<i>Salmonella enteritidis</i> ser				Jamaica	0	1	0
Newport	56	64	127	Rubislaw	0	5	0
Typhimurium	23	50	39	Panama	0	3	1
Javiana	13	26	32	Clabornei	0	1	0
New Brunswick	0	0	50	Poona	0	1	7
Agona	0	0	45	Newington	0	1	0
Oranienburg	5	3	4	Anatum	0	1	1
Heidelberg	8	8	24	Cubana	0	2	0
Infantis	3	16	15	Berta	0	3	1
Montevideo	1	1	1	Derby	0	1	1
Norwich	3	2	19	Duesseldorf	0	2	0
Saint Paul	3	0	2	Binza	0	1	0
Thompson	4	2	9	Georgia	0	1	1
Bredeney	2	0	0	Typhimurium var			
Christianborg	1	0	0	Copenhagen	0	4	15
Bareilly	1	5	1	San Diego	0	0	3
Enteritidis	3	6	4	Newlands	0	0	2
Ibadan	2	4	10	Manhattan	0	0	1
Minnesota	2	0	0	Lomita	0	0	1
Java	4	4	1	Nigeria	0	0	1
Drypool	1	0	0	Gaminara	0	0	1
Senftenberg	0	1	7	---	---	---	---
				150	274	485	

raw agricultural and marine products; control of contamination during the manufacture of processed foods and prevention of contamination of foods in commercial and institutional food service operations. Likewise, there must be consumer education to instill the proper handling of foods in the home by the housewife or ultimate consumer. The public needs to give its support to regulatory activities of national, state and local food protection programs. Government and industrial surveillance programs could be enlarged, and there should be more research into the nature of the organisms and the disease to find further ways to bring it under control, to evaluate control efforts, and to improve food handling methods.

Adequate diagnosis by clinical observation alone is seldom possible. Confirmation by laboratory isolation and identification of the infective organisms is desirable. Bacterial agglutination tests for typhoid and paratyphoid (Widal Test) may be useful for a tentative diagnosis but are significant only at titres of 1:160 or above, and should be confirmed by isolation of the organism from a feces or urine culture. The agglutination tests are seldom of value in gastroenteritis-type disease since there is no time for development of antibodies, and there are 1,300 plus serotypes.

The best specimen for laboratory isolation and diagnosis is a fresh or properly preserved stool specimen taken before treatment. In febrile disease, a blood culture may be quite useful. Identification of serotypes of *Salmonella* and phage-types of *S. typhi* is an important epidemiological

tool in the health Department's efforts to control salmonellosis and should be performed on isolates from each case. If a laboratory does not have the facilities to perform these, an isolate should be forwarded to the Division of Public Health Laboratories, Arkansas State Department of Health, so that this identification can be made. Good surveillance and control requires that all cases of salmonellosis be reported to the Local or State Health Department.

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ANSWER—Electrocardiogram of the Month

This series of rhythm strips illustrates the ominous type of premature ventricular depolarization. Before Lidocaine they occur with a coupling interval of 0.30 seconds. By this we mean that the distance between the onset of the premature beat is 0.30 seconds after the onset of the preceding QRS complex. This coupling relationship was noted for more than a dozen beats prior to therapeutic intervention. Such a close coupling interval is one of the major harbingers of a potentially lethal ventricular arrhythmia. For this reason the patient received 50 mgm Lidocaine i.v. His coupling interval increased to 0.34, but note he had a bout of salvo of ventricular tachycardia—3 consecutive ectopic beats. Because of the persistence of premature beats, even at a slightly wider coupling interval, additional Lidocaine was given. The coupling interval lengthened to 0.38 seconds, and then the premature beats were abolished. Two recent papers originating at NHLI are pertinent. *Circulation* v. 46 #3 points out that Lidocaine can often aggravate premature ventricular beats at low or intermediate concentrations, and suppress them only at relatively high concentrations. Thus one may get salvos as the serum concentration is rising, then suppression of the beats at the high concentrations, only to have them re-emerge as the concentration of Lidocaine falls off. A more recent article by Epstein et al (*CIRCULATION* v. 47 #3 March 73) suggests that Lidocaine is actually only effective against the more benign premature ventricular beats, and that it is much less effective against the "malignant" premature beats which commonly lead to lethal ventricular tachycardia. Further, there is much controversy over the valid criteria of "benign" vs. "malignant" premature beats. Suffice it to say that this area of clinical investigation is wide-open, and we would be wise to evaluate the anti-arrhythmic success we have in each individual patient without preconceived ideas about what drugs "ought to" be best.



Azathioprine in Pemphigus Vulgaris

J. L. Burton et al (Royal Victoria Infirmary, Newcastle upon Tyne, England)

Brit Med J 3:84-85 (July 11) 1970

Azathioprine (Imuran) was used in a daily dosage of 2.5 mg/kg body weight to treat four patients with pemphigus vulgaris who were being maintained on systemic steroids at the start of the azathioprine treatment. One patient was unable to tolerate azathioprine, while the other three patients were able to discontinue steroid therapy. In two patients the disease relapsed when azathioprine was stopped, but was again controlled when the drug was restarted.



EDITORIAL

The Use of Selective Angiography in Acute GI Bleeding

Jerry C. Holton, M.D.*

The use of selective angiography in the localization of bleeding from the gastrointestinal tract is well established.^{1,2,3,4,5} Radiographic findings in acute and chronic blood loss from the gastrointestinal tract have been described. Multiple articles also define radiographic findings in specific disease entities.^{6,7,8,9,10,11,12,13} The purpose of this article is to show the value of selective arteriography, i.e., celiac, superior mesenteric, and inferior mesenteric arteriography, as a means of localizing the bleeding point in acute gastrointestinal hemorrhage.

In 1953, Seldinger¹⁴ introduced a new technique of percutaneous arterial catheterization. Since the description of this new technique, aortography and selective arteriography have rapidly developed. Odman described in detail the technique of selective celiac and superior mesenteric arteriography in 1956.¹⁵ In an excellent article, Baum and Finkelstein¹⁶ described clinical applications of these techniques in 1965.

Although the technique and value of this exam is well established, there remains some reluctance on the part of clinicians to use this



CASE I

This 42-year-old white male developed upper G.I. bleeding while hospitalized. Selective celiac arteriogram was done. A bleeding point was suspected along the greater curvature. Because of this, super selective catheterization of the gastro-duodenal artery was done and demonstrated a large bleeding point along the greater curvature of the stomach. Surgery revealed this to be a large benign gastric ulcer.

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diagnostic tool. The diagnostic challenge of acute gastrointestinal hemorrhage is one that confronts the physician constantly. Even the most astute diagnostician may be defeated in his investigation into the cause and location of bleeding. Radiographic evaluation by means of selective celiac and superior mesenteric arteriography offers the gastroenterologist and surgeon another diagnostic tool that may be extremely helpful, or indeed, the only method available to demonstrate the bleeding site. I would like to emphasize that specific disease entities cannot always be identified. The most important function of these studies is to localize the bleeding area. Statistically, the site and/or cause of bleeding has not been determined in 20% of patients with gastrointestinal hemorrhage prior to exploratory surgery. This can be significantly reduced by selective arteriography, providing extremely valuable information to the surgeon. A small but definite percentage of these patients will remain undiagnosed even after adequate surgical exploration of the gastrointestinal tract.

If such a situation occurs, the clinician is then faced with the serious problem of handling a post-operative patient that may continue to bleed. Selective celiac and superior mesenteric arteriography is a worthy diagnostic aid in such a patient when re-operation is seriously considered. If this technique is properly performed, it should present no significant morbidity and only very minimal hazards to the patient. Its potential diagnostic value far outweighs the minimal complication risks.

Angiography is time consuming, expensive, and relatively unpleasant for the patient. The prudent clinician should ask, "How can this be of value to me in the management of my patients with acute gastrointestinal hemorrhage?". The need for accuracy in locating these life-threatening lesions is obvious. Location of the bleeding site will frequently: (1) Shorten the surgical time; (2) Allow the shortest and simplest surgical procedure in these acutely ill patients; (3) Provide identification of the bleeding point in patients who have or develop gastrointestinal



CASE II

This 25-year-old white female presented at the E. R. with massive bright red rectal bleeding. Selective superior mesenteric arteriogram demonstrated a bleeding diverticulum of the ascending colon. Because of other complicating medical problems, this patient was not operated on. She was treated with infusion of Pitressin and the bleeding was controlled.

bleeding; (4) GI bleeding of obscure origin is occasionally encountered in patients who have multiple previous abdominal surgical procedures. Localization of the point of bleeding in these patients can markedly simplify the surgical approach.

Barium studies are frequently done and very often fail to reveal the site of hemorrhage. There are several reasons for this: (1) The frequent presence of blood clots in the stomach or intestinal tract obscure the area of pathology; (2) The unfavorable conditions in which the examination must be performed in the acutely ill patient, an example being the patient in which poor preparation or no preparation can be obtained prior to the barium examination; (3) The shallow mucosal tears or vascular malformations that do not produce defects large enough to be seen on barium studies.

Percutaneous selective arteriography fulfills the requirement of simplicity, accuracy, and low morbidity which are necessary in the acutely ill

patient. This method has been successful in showing bleeding of as little as 0.5 cc. per minute. Selective abdominal arteriography is safe to perform provided it is carried out by a physician thoroughly trained and familiar with catheterization techniques. Baum and associates¹⁷ reported 600 celiac and superior mesenteric arteriographies with no major complications. In these 600 arteriographies, 12 hematomas were obtained at the arterial puncture site. All of these hematomas resolved without sequelae. The only major contraindication to the exam is severe arterial disease that involves the femoral vessels. Under these circumstances, there is some risk in dislodging an atheromatous plaque. In these patients, it is possible to perform selective arteriography from the axillary artery. There should be no hesitation to examine a patient that is actively bleeding. It is actually desirable that the patient be bleeding during the exam to prove helpful in locating the source of the hemorrhage. Careful monitoring of the patient



CASE III

This 51-year-old Negro male presented at the E. R. with massive upper G. I. bleeding. The patient was brought directly from the E. R. to arteriography. He was given 6 units of blood during the arteriogram which took one hour. Radiographic findings—Bleeding site in duodenal bulb.

COMMENT: Bleeding duodenal ulcer. At surgery, the ulcer measured approximately 3 x 3 cm. There was no perforation into the abdomen. Arterial phase film shows a small amount of bleeding from the gastro-duodenal artery while the venous phase film shows a large collection of contrast material within the lumen of the duodenal bulb.

is, of course, necessary during the procedure. IV fluids or transfusions may be given during the procedure if necessary.

Angiography is not competitive with, but is complimentary to other diagnostic radiological procedures of the gastrointestinal tract. Barium meal exams may show a lesion but will not indicate if the lesion is bleeding. Angiography will show the bleeding point, but may not always disclose the nature of the bleeding lesion. With acute hemorrhage of the colon, a barium examination may show multiple diverticula throughout the organ, but may not show the bleeding diverticulum. Selective arteriography will show the bleeding area and thus simplify and shorten the procedure for the surgeon. This certainly seems advisable in an acutely ill patient.

We do not believe that abdominal angiography should be used to the exclusion of other diagnostic procedures of the gastrointestinal tract.



CASE IV

This patient was admitted to E.R. with massive upper GI bleeding. Arteriogram showed a bleeding point in the lesser curvature of the stomach with contrast pooling in the fundus from massive extravasation intraluminally. At operation, the patient was found to have a bleeding ulcer in the lesser curvature of the stomach with pooling of contrast in the fundus of the stomach.

The correct diagnosis of hemorrhage from the gastrointestinal tract is sufficiently difficult to use all available diagnostic techniques. There is some limitation of combining angiography and barium examinations. The angiographic procedure must be done first, since barium remaining in the GI tract will obscure areas of the abdomen and make accurate interpretation of the arteriogram impossible.

Summary

Acute, active hemorrhage from an unknown site in the gastrointestinal tract can rapidly lead to irreversible shock and death. In a small but significant number of these patients, the bleeding site remains unknown, even after adequate surgical exploration of the gastrointestinal tract. We feel that arteriographic evaluation of these patients using selective celiac and superior mesenteric arteriography prior to surgery decreases the operative time and allows the surgeon to do the simplest procedure. Occasionally, patients will develop gastrointestinal bleeding after acute or chronic illnesses or after surgical procedures. Arteriographic localization of the bleeding site in these patients prior to operation or re-operation is a valuable way to obtain crucial clinical information.

I would like to thank Dr. Jerry Phillips for some of the case material presented here and Mrs. Mary Minden for the preparation of this manuscript.

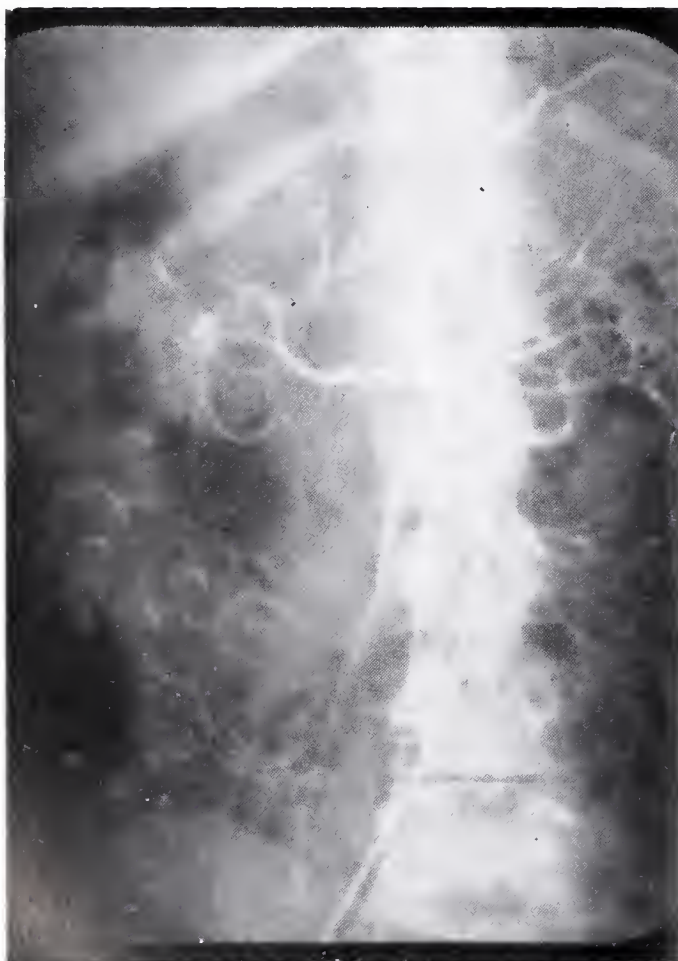
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CASE V

This 33-year-old Negro female was admitted with a history of lower GI bleeding. Upon admission, a B.E. was performed which showed diverticulosis. While in the hospital, she started to have massive GI bleeding. A selective superior mesenteric arteriogram was performed which showed massive arterial bleeding and pooling of contrast media in a large diverticulum of the ascending colon.



CASE V (Cont.)

Final Diagnosis: Bleeding diverticula, right colon.

COMMENT: This exam demonstrates the value of combining barium studies and arteriography. The barium exam of the colon demonstrated multiple diverticula while the arteriogram shows the bleeding diverticulum. Note the arterial phase film shows no pooling of contrast but venous phase demonstrates pooling of contrast material in the diverticulum.

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MEDICINE IN THE



THE MONTH IN WASHINGTON

The Administration has notified the American Medical Association it is "prepared to review thoroughly the regulations governing the medical profession" in the Phase 3 controls that continue the limits on physicians' fees increases.

The Administration's letter avoided a direct reply to the AMA's petition of January 15 to President Nixon urging that physicians be exempted from the Phase 3 controls as has been most of the rest of the economy.

John Dunlop, director of the Cost of Living Council, said the President had asked him to respond to the AMA letter. Dunlop said "having assumed responsibility for the economic stabilization program last month, I am now prepared to review thoroughly the regulations governing the medical profession."

"As you know," wrote Dunlop to John R. Kernodde, M.D., Chairman of the AMA Board of Trustees, "the health field has been persistently among the most inflationary areas in our

economy, and I am sure it is our goal to alter that trend."

The AMA had told the President that physicians' fees rose only 1.7 per cent during the first 12 months of Phase 2. "... we have surpassed the original expectations," said Dr. Kernodde in the AMA letter to the President. "In view of our demonstrated success during the past year, you can imagine our dismay... that the medical profession has once again been singled out under special controls."

Dunlop's letter did not mention the AMA's request for a meeting with President Nixon and his top economic advisers to discuss the issue.

In his letter to Dr. Kernodde, Dunlop said: "We are presently in the process of appointing members to the new Health Industry Advisory Committee and I assure you that the views of physicians will be represented on that committee. As soon as an executive director for the committee is named, I will have him contact you for suggestions on how to best meet our goals

for controlling health care costs under Phase 3.

"Meanwhile, I know the federal government can count on your cooperation in following the legal requirements now in effect, and I look forward to working with you to evaluate new alternatives."

* * * * *

The use of human subjects in medical research is essential for the benefit of society despite the fact that it will place some participants at a calculated disadvantage, the American Medical Association told Congress.

The AMA comments were made to Senator Kennedy's Senate health subcommittee in hearings on the subject of human experimentation and if a need exists for federal legislation to forestall abuses.

William R. Barclay, M.D., Assistant Vice-President of the AMA, told the senators that, "The practice of medicine is both an art and a science, and we are constantly seeking new means to improve the quality and length of life. The evolution of sound medical practice through the years has reduced the incidence of pain and has done much to advance the cause of human dignity. These procedures, however, today as always, require the weighing of risk against benefit at every level of professional discretion. It is evident that there is a certain degree of risk attendant to any medical procedure.

"But if we are to continue to improve our high standards of patient care, we must maintain our initiatives in biomedical research. The accomplishments of modern medical practice testify to the merits of continued research. Such advances are hard won, but the benefits are beyond question.

"Medicine as a science must conduct experimentation if it is to progress rather than stagnate. Experimentation is an essential principle of all sciences, be they biological or physical. Scientific experiments are conducted both to test new hypotheses and to reexamine the validity of accepted hypotheses.

"A medical experiment with human subjects is sometimes referred to as a clinical trial. As such it should be a test of a reasonable hypothesis based on sound laboratory data. It should not be a random groping for information. A well designed clinical trial has elements in its design which assure that it will be a useful and a justifiable undertaking.

"... A human experiment, by its very nature, establishes a set of circumstances which will place some of the participants at a calculated disadvantage. Generally a trial is established to answer the question, 'Is treatment A better than treatment B?' No definitive answer to this question can be obtained until the test is conducted over an adequate period of time and sufficient data has been gathered by which to measure the relative response of the subject.

"... Through the process of clinical investigation, which we have described here, drugs and procedures become available for widespread usage in patient care.

"... We note that it is the Committee's hope that these hearings will encourage continued support of and advancement of biomedical research. If we are to continue to increase our knowledge and continue to improve medical care for the benefit of society, medical research using human subjects is essential," Dr. Barclay concluded.

* * * * *

The Council on Foods and Nutrition of the American Medical Association has labeled the dietary recommendations of the current best-seller book, "Dr. Atkins' Diet Revolution," as unscientific and potentially dangerous to health.

The book recommends a sharply restricted intake of carbohydrates to lose weight. The author is Robert C. Atkins, M.D., of New York City.

"The 'diet revolution' is neither new or revolutionary," the AMA Council declared in a formal statement analyzing the book's recommendations.

"It is a variant of the 'familiar' low carbohydrate diet that has been promulgated for years. The rationale advanced to justify the diet is, for the most part, without scientific merit."

Even more serious: "The Council is deeply concerned about any diet that advocates an 'unlimited' intake of saturated fats and cholesterol-rich foods (another aspect of the Atkins diet)."

Individuals responding to such a diet with a rise in blood fats will have an increased risk of coronary artery disease and atherosclerosis (hardening of the arteries), particularly if the diet is maintained over a prolonged period, the Council said.

The book states that the diet promotes production of a "fat mobilizing hormone" (FMH)

... "and the production of FMH is the whole purpose of this diet — and the reason it works when all other diets fail." According to Dr. Atkins, "FMH releases energy into your bloodstream by causing the stored fat to convert to carbohydrate."

No such hormone as a "fat mobilizing hormone," has been established in man, said the AMA Council. In addition, no appreciable conversion of fat to carbohydrate occurs in the human body.

Carbohydrates are organic chemical substances containing carbon, hydrogen and oxygen. They are important sources of energy for the body. Sugar and starches, such as potatoes, rice and wheat flour, are important sources in the everyday diet.

"Any grossly unbalanced diet, particularly one which interdicts the 45 per cent of calories that is usually consumed as carbohydrates, is likely to induce some anorexia (loss of appetite) and weight reduction if the subject is willing to persevere in following such a bizarre regimen. However, it is unlikely that such a diet can provide a practicable basis for long-term weight reduction or maintenance, namely, a life-time change in eating and exercise habits," the Council declared.

The Council urged physicians to counsel their patients as to the potentially harmful effects of the Atkins diet.

"It is unfortunate that no reliable mechanism exists to help the public evaluate and put into proper perspective the great volume of nutritional information and misinformation with which it is constantly being bombarded," the Council statement said.

The Council declared that publishers and writers who advise the public on diet and nutrition "Have a unique responsibility to insure that such information and advice is based on scientific facts established by responsible research."

* * * * *

It appears likely that Congress this year will pass legislation to improve emergency medical services throughout the nation. Both the Senate and the House have opened hearings on several bills that would provide federal funds to assist local governments in improving ambulance and emergency room services.

Among the major bills addressing itself to emergency medical care is one developed by the

AMA. Sponsored by Senator J. Glenn Beall (R-Md.) and by Representative James Hastings (R-NY.), the AMA bills (S 654 and H. R. 4952) provide for the establishment of a comprehensive emergency medical system across the nation. Direction and financial assistance would be at the federal level, however the programs would be developed at the community level.

In outlining the AMA bill before a subcommittee of the House, Roy M. Baker, M.D., Jacksonville, Florida, summed up the extent of the problem by excerpting certain statistics from a recent report published by the National Research Council . . .

"Accidental injury and acute illness generate a staggering demand on ambulance and rescue services, allied health personnel, physicians, and hospitals for the delivery of emergency medical services. Accidental injury is the leading cause of death among all persons aged 1 to 38. Each year more than 52 million U. S. citizens are injured, of whom more than 110,000 die, 11 million require bed care for a day or more, and 400,000 suffer lasting disability at a cost of nearly \$3 billion in medical fees and hospital expenses and over \$7 billion in lost wages. Those requiring hospitalization occupy an average of 65,000 beds for 22 million bed-days under the care of 88,000 hospital personnel. This hospital load is equivalent to 130 500-bed hospitals. Of the more than 700,000 deaths from heart disease each year, the majority are due to acute myocardial infarction and more than half of these deaths occur before reaching a hospital. Approximately 40 million persons seek care each year in hospital emergency departments as a result of accidents, heart disease, stroke, poisoning, diabetic coma, convulsive disorders, and many other illnesses."

In his testimony, Dr. Baker noted as a matter of interest for the Committee, there are currently seven two-year emergency residency programs in operation. Beginning on July 1, 1973, there will be an additional seven residency programs operational. In addition, there are three institutions conducting short-course training programs in the field of emergency medicine.

* * * * *

While the abuses of alcohol, heroin and other drugs show no signs of disappearing soon and may even increase, drugs do not threaten to destroy society, the National Commission on Mari-

juana and Drug Abuse has told Congress and President Nixon.

Making more than 100 recommendations to de-emphasize government involvement in the drug field, which the panel sharply criticized, and re-emphasized family, church and community involvement, the 481-page report concluded:

— "The Commission sees little evidence of any decline in the rate of experimental use, particularly of marijuana and hallucinogenic drugs, by young people. . . . Youthful experimentation will remain one of the most difficult aspects of the drug problem."

— "The Commission does not anticipate a quick end to the heroin problem. A large segment of the current heroin-dependent population resists any form of treatment while new users continue to be recruited."

— "The Commission does not anticipate the imminent discovery of a cure or vaccine for drug dependence. Compulsive drug use does not seem to be the kind of phenomenon for which science will discover a 'magic bullet'."

— "The Commission foresees a possible continuing increase in the already extensive phenomenon of circumstantial use, slowed only by reduced availability of specific substances within legitimate medical channels. Only an effective long-term policy can forestall or diminish this development."

— "The drug problem, as perplexing and extensive as it is, is not going to bring about the collapse of our society. We will make some progress in dealing with it, but we should not harbor unrealistic hopes for the future."

The report by the high-level Commission, which a year ago recommended that all criminal penalties for personal use and possession of marijuana be abolished, came as the White House announced plans to group all federal drug law enforcement under one agency in the Justice Department.

* * * * *

Senator Thomas McIntyre (D-N.H.) and Representative Omar Burleson (D-Texas) introduced the National Health Care Act of 1973, the plan developed by the private health insurance companies.

The 1973 proposal provides catastrophic health insurance for every individual up to

\$250,000. Any person who incurs \$5,000 or more in medical expenses during a 12-month period would be eligible for up to \$250,000 in benefits, even if some or all of his expense is reimbursed by insurance. McIntyre and Burleson said this new provision answers a major health fear of millions of Americans — fear of catastrophic illness or injury.

Cost to the government in new revenues would be \$8.1 billion. The bill provides tax disincentives for employers whose group plans don't meet standards and tax incentives for individuals not belonging to groups to encourage purchase of insurance. State pool plans are provided for the poor and near poor.

The health insurance industry bill now brings the count of major national health insurance proposals to three . . . AMA's Medcredit plan and the sweeping proposal of organized labor were introduced earlier. Still to be seen is this year's proposal of the Nixon Administration.

* * * * *

Teleconference System Expanded to Include Arkansas Hospitals

The University of Texas Medical School at San Antonio is planning to enlarge their teleconference system and make Therapeutic Seminars available to hospitals in Arkansas, during the coming academic year, September 1973 to May 1974. This would allow physicians at any of the participating hospitals in Arkansas to take part in these seminars through a remote "Teleconference" System. This is a two-way telephone communication technique which allows the physician in his own hospital conference room to hear the speaker, see the slides and participate as if present in the same room as the panelists. Each seminar will be presented by a moderator and three or four expert panelists. There will be 45 minutes of discussion followed by 15 minutes of questions and answers; questions can be asked directly over the teleconference network.

Each program is acceptable for one prescribed hour by the American Academy of Family Physicians and is creditable for one hour in Category 1 for the American Medical Association Physician's Recognition Award. This credit is obtainable whether the program is attended at the medical school in San Antonio or at any of the hospital telelecture sites.



Medical Assistants Organize

At a meeting in Blytheville in late March, medical assistants in Mississippi County voted to request a charter as a chapter of the Arkansas Society of the American Association of Medical Assistants.

Approximately thirty employees of physicians in that area participated in the meeting. Delores Spence served as chairman for the meeting. Deany Reid of Fayetteville, president of the State Medical Assistants Society, addressed the group on the advantages of a medical assistants organization. Ginger Patton, also of Fayetteville, spoke briefly on personal experiences which emphasized the benefits of the organization. Drs. Hunter Sims, Jr., Ronald D. Smith, James J. Webb, Francis E. Utley, and C. E. Holcomb attended the meeting and supported the organization of a local chapter of medical assistants. Other out-of-town guests attending were Paul Schaefer, Leah Richmond and John McIntosh of the State Medical Society staff in Fort Smith.

The charter from the State Society of Medical Assistants was presented to the Mississippi group at the annual meeting of the State Society in Fort Smith in early May.



COUNCILORS ELECTED AT 1973 ANNUAL SESSION

Dr. Fred C. Inman, Jr.
Carlisle

Councilor, Third District

Dr. Fred C. Inman, Jr., of Carlisle was elected to the position of councilor for the third district at the Society's annual meeting in Hot Springs in April. He succeeded Dr. Dwight W. Gray of Marianna in the position.

Dr. Inman was born in Prescott, Arkansas, on July 16, 1922. He attended Henderson State Teachers College at Arkadelphia and was graduated in 1948 from the University of Arkansas at Fayetteville, receiving a B.S. degree in Zoology. He was graduated from the University of Arkansas School of Medicine in 1952 and he interned at St. Vincent Infirmary in Little Rock. He is a member of the Lonoke County Medical Society and the American Medical Association; he also holds a membership in the American Academy of Family Physicians.

A family physician, Dr. Inman practiced for nine years in McCrory, Arkansas, before moving to Carlisle, where he has been practicing since 1963. His principal hobbies are golf and flying antique airplanes.

Dr. John H. Moore
El Dorado

Councilor, Fifth District

Dr. John H. Moore of El Dorado was elected to succeed Dr. Kenneth Duzan in the position of councilor for the fifth district at the annual meeting in Hot Springs in April.

A native of El Dorado, Dr. Moore was born October 12, 1939. He was graduated from the University of Arkansas and the University of Arkansas School of Medicine in 1960 and 1964, respectively. He completed his internship at Grady Memorial Hospital in Atlanta, Georgia. In 1969, he completed a four-year residency in General Surgery at Charity Hospital in New Orleans. He served as senior teaching resident in the Department of Surgery at Louisiana State University in New Orleans, and was Assistant Clinical Director for Surgery at Charity Hospital. From 1969 until 1971, he served in the United States Air Force at Valdosta, Georgia.

Dr. Moore is Board Certified in Surgery. He has been practicing in El Dorado since 1971. He is a member of the Union County Medical Society and the Rives Surgical Society.



PERSONAL AND NEWS ITEMS

Specialty Groups Elect Officers For 1973-74

Dr. Paul Rogers was elected president and Dr. Neil Crow was elected vice president of the Arkansas Chapter of the American College of Radiology. Dr. Rogers and Dr. Crow are both from Fort Smith.

Dr. Robert H. Atkinson of Hot Springs was elected president of the Ear, Nose and Throat Section of the Arkansas Medical Society. Dr. Edwin L. Harper of Hot Springs was elected vice president and Dr. J. Thomas Smith of Little Rock was elected secretary-treasurer.

Dr. Tom P. Coker of Fayetteville was elected president of the Arkansas Orthopaedic Society. Dr. Larry E. Mahon of Jonesboro was elected secretary-treasurer.

Dr. Hayes Shows Film at Meetings

Dr. Harry Hayes of Little Rock, who is on the Clinical Staff of the Department of Surgery of the University of Arkansas School of Medicine, has recently completed work on the preparation of a film on Wound Healing. This is the first of a series of films and is devoted to Healing by Secondary Intention. Dr. Hayes has recently shown the film at several medical meetings including: The American Association of Railway Surgeons, Chicago, Illinois; Southwestern Surgical Congress, Scottsdale, Arizona; Southeastern Society of Plastic and Reconstructive Surgeons, Fort Lauderdale, Florida; The American Academy of Obstetrics and Gynecology, Bal Harbour, Florida; The American Medical Association, New York City, New York; The British Association of Plastic Surgeons, Bristol, England. The film has also been used in teaching medical students and the house staff in private hospitals in the Little Rock area.

Physician Closes Practice

Dr. James Bethel has closed his practice in Benton. He will be the physician at the Alcoa Aluminum Company and, in addition, will be associated with the Veterans Administration Hospital in Little Rock. Dr. Bethel had practiced in Benton for approximately ten years.

Physician Locates in Lewisville

Dr. Thomas C. Flannigan has opened his office for the practice of medicine in the Velvin Building in Lewisville. Dr. Flannigan has been associated with the hospital in Manila for the past several years.

Doctors Hold Open House

Drs. James W. Durham, George A. McCrary and Leslie F. Anderson held open house at their new clinic on April 10th for the citizens of Jacksonville. The clinic, which is located in Crestview Plaza on Main Street, has modern X-ray equipment, a complete laboratory, and the latest in electro-cardiographic equipment.

Physician Opens Clinic

Dr. Doyle H. Morrison has opened a new clinic in Cabot. The clinic has three examining rooms, an X-ray room and a laboratory. Dr. Morrison is a 1972 graduate of the University of Arkansas School of Medicine.

New Doctors' Building Planned

The D. B. Land Company will build a new "Doctors Park" building on the grounds of the new Baptist Medical Center now under construction at Kanis Road and Interstate 430 in Little Rock. The building, which is scheduled for completion in June 1974, will house its physician-owners in 53,000 square feet of space. The site of the building is on a hillside, which will allow each of its three floors to have a ground-level entrance. The D. B. Land Company was formed by twenty physicians, with Dr. Howard Schwander serving as president; Dr. Carl Wenger, vice president; and Dr. Howard Armstrong, secretary-treasurer. The company's Board includes the officers and Dr. Roy Brinkley and Dr. Elvin Shuffield.

Recipients of Award Announced

The following member-physicians are recipients of the American Medical Association's Physician's Recognition Award for 1972 to date: Jerry D. Blaylock, Jonesboro; J. Wayne Buckley and Charles M. Davis of Pine Bluff; W. E. Jennings, Rogers; Joe C. Parker, Springdale; Ben N. Saltzman, Mountain Home; E. Mitchell Singleton, Fayetteville; Frank G. Thibault, Jr.,

Benton; Jack N. Thicksten, Alma; Kenneth Wallace, Fort Smith; Robert White, Malvern; K. W. Cosgrove, Jr., J. A. Harrel, J. B. Holder, W. Mage Honeycutt, William S. Orr, Norton Pope, James L. Schrantz, Ruth Steinkamp and Akhtar Yusufji, all of Little Rock; Ray Biondo and George L. Mallory of North Little Rock; and Thomas H. Wortham, Jacksonville.

Physician Attends Course

Dr. J. Thomas (Tom) Smith of Little Rock attended the intensive course on the "Treatment of Maxillofacial Injuries", sponsored by the University of California at Davis, April 23-27, 1973.

Dr. Pappas Elected

Dr. James J. Pappas of Little Rock has been elected to Active Fellowship in the American Laryngological, Rhinological and Otological Society, Inc. (the Triological Society). He was inducted as a member at the annual meeting of the Society which was held in St. Louis on April 3rd.

A prerequisite for membership in the Society is satisfactory completion of a thesis in either a clinical or research subject relating to Otolaryngology. Upon satisfactory completion and acceptance of the thesis, the candidate is then eligible for election to Active Fellowship.

THINGS



TO COME

Aldersgate Children's Medical Camp

Aldersgate Medical Camp will be conducted June 25 to June 30, 1973, at Camp Aldersgate just outside Little Rock. The purpose of the camp is to provide outdoor camping experience for boys and girls eight to sixteen years of age that have medical problems or handicaps that preclude their attending a regular summer camp.

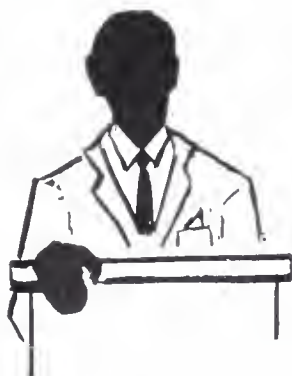
Questions concerning a child's eligibility should be directed to the Camp Director at 2000 Aldersgate Road, Little Rock, Arkansas 72205. A Medical Committee will review the applications.

Campers are accepted on a first-come, first-served basis and scholarships are available. Applications for scholarships and registration forms may be obtained by writing the camp office. The telephone number is 225-1444. The Aldersgate Medical Camp is sponsored by Arkansas pediatricians and has been endorsed by the Arkansas Medical Society. Tax deductible contributions for scholarships may be made directly to the above address.

Postgraduate Course on "Current Obstetric and Gynecologic Practice" Planned

The Department of Obstetrics and Gynecology of the University of Texas Medical School at San Antonio is planning to offer a postgraduate

course on "Current Obstetric and Gynecologic Practice" January 24-30, 1974. The course, given in three parts, is designed primarily as an aid to candidates for the American Board examination, but will be useful to practicing physicians who desire a resume of modern clinical practices in obstetrics and gynecology. Topics for the three parts are: "Gynecologic Pathophysiology and Oncology", "Gynecologic Endocrinology and Genetics" and "Obstetrical Pathophysiology". Enrollment fee is \$250. Registration must be made by December 1, 1973. For further details write: C. J. Pauerstein, M.D., Department Ob-Gyn, The University of Texas Medical School at San Antonio, 7703 Floyd Curl Drive, San Antonio, Texas 78284.



PROCEEDINGS OF SOCIETIES

Faulkner County Medical Society

The Faulkner County Medical Society and the Faulkner County Nurses Association co-sponsored a clinic for detection of high or low blood pressure and diabetes on April 18th and April 21st at Conway. Dr. Fred Gordy is president of the Faulkner County Medical Society.



NEW MEMBERS

Dr. Robert Allison Hoagland

Dr. Robert A. Hoagland has been accepted for membership in the Desha County Medical Society. A native of Scotts Bluff, Nebraska, Dr. Hoagland received a B.A. degree from Nebraska Wesleyan University in 1950, a M.S. degree from the University of Nebraska, in 1953, and a M.D. degree from Tulane University School of Medicine, New Orleans, Louisiana, in 1958. He completed his internship at McLeod Infirmary, Florence, South Carolina, and received residency training at Cook County Hospital. Before moving to Dumas in August 1972, Dr. Hoagland practiced in Mitchell, Nebraska, for twelve years.

Dr. Hoagland's office, for the practice of surgery and general medicine, is located at 145 West Waterman in Dumas. He holds a membership in the American Society of Abdominal Surgeons.

Dr. Alastair Guthrie

Dr. Alastair Guthrie is a new member of the Craighead-Poinsett County Medical Society. He was born in Dallas, Texas. His pre-medical education was received from Davidson College, Davidson, North Carolina, from which he was graduated in 1950 with a B.S. degree. In 1954, he was graduated from the University of Virginia Medical School, Charlottesville. From 1954 until 1956, he completed a general practice internship and residency at the University of Oklahoma Hospitals, Oklahoma City. He received residency training in Surgery at Harlan Memorial Hospital, Harlan, Kentucky, and also received training in Psychiatry at the New Jersey Neuropsychiatric Institute, Princeton, New Jersey.

Dr. Guthrie specializes in Psychiatry and is associated with the George W. Jackson Community Mental Health Center in Jonesboro. He holds a membership in the American Psychiatric Association.

Dr. Robert Vernon Borg

The Garland County Medical Society has announced that Dr. Robert Borg has been accepted for membership. A native of Chicago, Illinois, Dr. Borg received his pre-medical education at Arkansas Polytechnic College and the University of Arkansas. In 1965, he was graduated from the University of Arkansas School of Medicine. Dr. Borg completed his internship at John Peter Smith Hospital, Fort Worth, Texas. His residency work in General Surgery and Otolaryngology was done at the Veterans Administration Hospital in Dallas, Texas. From 1970 until 1972, he served in the United States Air Force.

Dr. Borg specializes in Otolaryngology and related head and neck surgery at 4409 Central in Hot Springs.

Dr. Edwin Leeth Harper

Dr. Edwin L. Harper has been accepted for membership in the Garland County Medical Society. Born in Hot Springs, Dr. Harper received a B.S. degree from Hendrix College at Conway in 1960, and in 1964 he was graduated from the University of Arkansas School of Medicine. Dr. Harper interned at the University of Alabama Medical Center and completed a residency in Otorhinolaryngology at the University of Texas Southwestern Medical School Affiliated Hospitals in Dallas.

A specialist in Otorhinolaryngology, Dr. Harper's office is at 4409 Central in Hot Springs.

Dr. Carl Hendrick Bell, Jr.

Dr. Carl H. Bell, Jr., a native of Shreveport, Louisiana, is a new member of the Jefferson County Medical Society. Dr. Bell attended Henderson State Teachers College and Ouachita Baptist College, both in Arkadelphia, Arkansas. He held a Fellowship in Tropical Medicine and Parasitology at the Louisiana State University School of Medicine in New Orleans in 1966, and he was graduated from the University of Arkansas School of Medicine in 1967. His internship was completed at the University of Tennessee, City of Memphis Hospitals.

Dr. Bell is a family physician and his office is at 1115 Cherry Street in Pine Bluff.

Dr. David Lloyd Bell

The Mississippi County Medical Society has recently added the name of Dr. David L. Bell to its membership roll. Dr. Bell is a native of Columbus, Kansas. He received a B.A. degree from the University of Iowa in 1964 and was

graduated from the University of Iowa College of Medicine in 1967. He interned at Parkland Memorial Hospital in Dallas, Texas, and completed a residency in Orthopedics at the University of Texas Southwestern Medical School Affiliated Hospitals in Dallas in 1972.

Dr. Bell specializes in Orthopedic Surgery at the Chickasawba Hospital in Blytheville.

Dr. Donald Eugene Fisher

Dr. Donald E. Fisher is a new member of the Phillips County Medical Society. He was born in Chicago, Illinois, and was graduated from the University of California and the Autonomous University of Mexico in 1951 and 1968, respectively. His internship was completed at Memorial Baptist Hospital in Houston, Texas. His residency work in Psychiatry was done at the University of California Affiliated Hospitals at Irvine, California.

Dr. Fisher's office is on Hospital Drive in Helena. He holds a membership in the American Psychiatric Association.

Dr. Theeradej Honghiran

Dr. Theeradej (Ted) Honghiran, a native of Pisanuloke, Thailand, has been accepted for membership in the Pope-Yell County Medical Society. Dr. Honghiran received his pre-medical education at the Faculty of Medical Sciences, Bangkok, Thailand, graduating in 1961. His medical education was received at the Faculty of Medicine, Chiangmai University, Thailand, from which he was graduated in 1965. Dr. Honghiran interned at Cook County Hospital in Chicago and did his residency work in Orthopedic Surgery at the University of Arkansas Medical Center.

Since April 1972, Dr. Honghiran has been associated with Dr. James M. Kolb, Jr., at 112 South Fulton in Clarksville.

Dr. Robert Baxter Nisbet

Dr. Robert B. Nisbet, a native of Dennison, Texas, is a new member of the Pope-Yell County Medical Society. In 1959, he was graduated from the University of Texas at Austin with a B.A. degree and in 1963, he received his M.D. degree from the University of Texas Southwestern Medical School in Dallas. His internship was completed at St. Joseph Hospital in Houston and his residency work in Obstetrics and Gynecology was done at St. Paul Hospital in Dallas. Dr. Nisbet practiced in Dallas for three years. He served as

Assistant Professor and Clinical Instructor of Obstetrics and Gynecology at the University of Texas Southwestern Medical School. He is Board Certified by the American Board of Obstetrics and Gynecology and he is a Fellow in the American College of Obstetricians and Gynecologists and a Diplomate, American Board of Obstetrics and Gynecology.

Dr. Nisbet is associated with the Millard-Henry Clinic in Russellville, where he specializes in Obstetrics and Gynecology.

Dr. William James Stocker

The Saline County Medical Society has recently added the name of Dr. W. J. Stocker to its membership roll. A native of Oconomowoc, Wisconsin, he attended the University of Arkansas and was graduated from the University of Arkansas School of Medicine in 1940. He interned at Shreveport Charity Hospital, Shreveport, Louisiana. From 1941 until 1945, Dr. Stocker served in the United States Army Medical Corps; from 1946 until 1968, he was in practice in Fayetteville, Arkansas. Since 1969, Dr. Stocker has been in the general practice of medicine at the Arkansas State Hospital, Benton Unit.

Dr. Donald Hobart Pellar

The Sebastian County Medical Society has announced that Dr. Donald H. Pellar is a new member of their Society. Dr. Pellar is a native of Chicago, Illinois. He attended the University of Miami and then entered the Pritzker School of Medicine of the University of Chicago, from which he received his M.D. degree in 1959. Dr. Pellar interned at the Charity Hospital of New Orleans. His residency work in Neurology at the Mayo Clinic was completed in 1964. From 1965 until 1969, he was practicing in Miami, Florida, and from 1970 until 1972, he was in practice in Temple, Texas. Dr. Pellar has held teaching appointments at the University of Arkansas School of Medicine, the University of Miami School of Medicine, and the University of Texas Southwestern Medical School. He is associated with the Holt-Krock Clinic in Fort Smith at 1500 Dodson Avenue, where he specializes in Neurology. Dr. Pellar holds a membership in the American Academy of Neurology and the American Electroencephalographic Society.

Dr. Peter James Carroll

Dr. Peter J. Carroll, a native of Spearsville, Louisiana, is a new member of the Union County

Medical Society. He received his pre-medical education at the Louisiana Polytechnic Institute at Rushton, graduating in 1952, and his medical education at Louisiana State University School of Medicine at New Orleans, graduating in 1956. After completing his internship at Midstate Baptist Hospital in Nashville, Tennessee, Dr. Carroll served in the United States Air Force until 1959. A family physician, Dr. Carroll practiced at Bernice, Louisiana, until May 1972, at which time he moved to El Dorado and is now associated with the Diagnostic Clinic at 416 North Newton.

* * *

The following physicians have been added to the membership roll of the Pulaski County Medical Society:

Dr. Durward Brooks Allen, Jr.

Dr. D. B. Allen is a native of Nashville, Arkansas. He attended Ouachita Baptist College at Arkadelphia. In 1965, Dr. Allen was graduated from the University of Arkansas School of Medicine. He stayed on at the University Medical Center in Little Rock for his internship and his residency work in Obstetrics and Gynecology, which he completed in 1971. Dr. Allen is a Junior Fellow of the American College of Obstetricians and Gynecologists. He is associated with the Obstetric and Gynecology Professional Associates at 500 South University in Little Rock.

Dr. Leslie Fay Anderson

Dr. Leslie Fay Anderson is a native of Blytheville, Arkansas. He received a B.S. degree from the State College of Arkansas at Conway in 1967, and was graduated from the University of Arkansas School of Medicine in 1971. He interned at St. Vincent Infirmary in Little Rock and is now associated with Dr. James W. Durham and Dr. George A. McCrary in the general practice of medicine at 2 Crestview Plaza in Jacksonville.

Dr. G. Edward Cook

Dr. G. Edward Cook was born in Russellville, Arkansas. He attended Arkansas Polytechnic College in Russellville and the University of Arkansas at Little Rock before entering the University of Arkansas School of Medicine, from which he was graduated in 1967. Dr. Cook is presently doing his residency work in Radiology at the Baptist Medical Center in Little Rock.

Dr. Warren Monroe Douglas

Dr. W. M. Douglas was born in Sheridan, Arkansas. He attended Little Rock Junior College and in 1951 he was graduated from the University of Arkansas School of Medicine. He com-

pleted his internship at the United States Naval Hospital at Oakland, California. From 1954 until 1964, Dr. Douglas was in the general practice of medicine at Jonesboro and from 1964 to 1967, he was in residency training in Psychiatry at the University of Arkansas Medical Center. Following completion of his residency work, he practiced in Memphis, Tennessee, until 1973. Dr. Douglas is Board Certified by the American Board of Psychiatry and Neurology. He is associated with the Arkansas Psychiatric Clinic at 12115 Hinson Road in Little Rock.

Dr. Robert L. Druet

Dr. Robert L. Druet is a native of Salina, Kansas. He received a B.A. degree from Washington University at St. Louis, Missouri, in 1957 and, in 1962 he received his M.D. degree from the University of Kansas School of Medicine. His residency work in Pathology (1963-1966) and Clinical Pathology (1969-1970) was at the University of Kansas Medical Center. During 1968-1969, Dr. Druet was a Hartford Fellow in Surgical Pathology at Washington University in St. Louis. He served as Instructor and Assistant Professor at the University of Kansas Medical Center. Dr. Druet is Board Certified in Anatomical Pathology and Clinical Pathology by the American Board of Pathology. Since July 1972, he has been with the Department of Pathology at the Baptist Medical Center in Little Rock.

Dr. Robert L. Fincher

Dr. Robert L. Fincher was born in Prescott, Arkansas. He attended Southern State College at Magnolia, the University of Arkansas and Ouachita Baptist College at Arkadelphia. He was graduated from the University of Arkansas School of Medicine in 1965. Dr. Fincher interned at the University Medical Center in Little Rock and also did his residency work in Radiology there. Since 1971, he has served as Assistant Professor of Radiology at the University of Arkansas Medical Center. Dr. Fincher is associated with the Arkansas Baptist Medical Center in Little Rock.

Dr. Herman Floyd Flanigin

Dr. Herman F. Flanigin is a native of Princeton, Texas. He received his pre-medical education at Northeastern State College in Talequah, Oklahoma, and was graduated from the University of Oklahoma School of Medicine at Oklahoma City in 1943. His internship was completed at the University of Oklahoma Hospitals

and he received residency training in Surgery at the same institution. He also had training in Neurosurgery at the Montreal Neurological Institute in Canada. Dr. Flanigin is associated with the Department of Neurosurgery at the University of Arkansas Medical Center. He is Board Certified by the American Board of Neurological Surgery.

Dr. Thomas Stuart Harris

Dr. T. Stuart Harris was born in Trona, California. Dr. Harris received a B.A. degree from the University of Arkansas at Fayetteville in 1961 and, in 1965 he was graduated from the University of Arkansas School of Medicine. His internship and residency work in Psychiatry was at the University Medical Center in Little Rock. Dr. Harris serves as Assistant Clinical Professor of Psychiatry at the University of Arkansas Medical Center and he holds a membership in the American Psychiatric Association. Dr. Harris is associated with the Arkansas Psychiatric Clinic at 12115 Hinson Road in Little Rock.

Dr. Edward Noble Hill

Dr. Edward N. Hill is a native of Stuttgart, Arkansas, and received a B.S. degree from the University of Arkansas at Fayetteville in 1962. In 1966, Dr. Hill was graduated from the University of Arkansas School of Medicine. He interned at Tampa General Hospital, Florida, and he completed his residency work in Obstetrics and Gynecology there in 1970. Dr. Hill's office, where he specializes in Obstetrics and Gynecology, is located at 5323 John F. Kennedy Boulevard in North Little Rock.

Dr. Joseph William Matthews

Dr. Joseph W. Matthews, a native of Little Rock, attended Hendrix College at Conway and was graduated from the University of Arkansas School of Medicine in 1965. He also completed his internship at the University Medical Center. In 1968, he completed two years of residency work in Pediatrics at the University of Tennessee Affiliated Hospitals in Memphis. From 1970 until 1972, he held a Fellowship in Pediatric Allergy at the University of Arkansas Medical Center. Dr. Matthews has been associated with the Arkansas Allergy Clinic, P.A. at 4001 West Capitol in Little Rock, where he specializes in Pediatric Allergy, since October 1972. He serves as an instructor in pediatrics at the University of Arkansas School of Medicine.

Dr. Robert William Moore

Dr. Robert W. Moore is a native of Jersey City, New Jersey. He attended the University of Texas at Austin and then entered the University of Texas Medical Branch at Galveston, from which he was graduated in 1948. He completed his internship at City-County Hospital in Fort Worth, Texas, and from 1954 until 1957, he held a Fellowship in Internal Medicine at Lahey Clinic in Boston, Massachusetts. Dr. Moore was in practice in Pampa, Texas, from 1957 until 1968 and from 1968 to 1972, he was in practice in Palestine, Texas. He is now the plant physician at the Remington Arms Company in Lonoke.

Dr. Robert James McGowan, Jr.

Dr. Robert J. McGowan, Jr., a native of Fort Smith, Arkansas, received a B.S. degree from the University of Arkansas at Little Rock in 1967 and was graduated from the University of Arkansas School of Medicine in 1971. He completed his internship at St. Vincent Infirmary in Little Rock. Dr. McGowan is associated with Dr. James Flack, Dr. Harold Hedges and Dr. William Wade in the general practice of medicine at 424 North University in Little Rock.

Dr. James Mayne Parker

Dr. J. Mayne Parker is a native of Fort Smith, Arkansas. He received his pre-medical education at the University of Arkansas at Fayetteville, receiving a B.A. degree in 1962. In 1966, he was graduated from the University of Arkansas School of Medicine and completed his internship at Tampa General Hospital, Tampa, Florida. His residency work in Ophthalmology was completed at the University of Arkansas Medical Center in 1972. Dr. Parker specializes in Ophthalmology at 500 South University in Little Rock.

Dr. Norton Allen Pope

Dr. Norton A. Pope was born in Camden, Arkansas. He received a B.S. degree from Ouachita Baptist College at Arkadelphia in 1960, and was graduated from the University of Arkansas School of Medicine in 1964. He interned at the University of Texas Medical Branch at Galveston, and also did his residency work in Surgery and Plastic Surgery at the same institution. Dr. Pope has been associated with Dr. Thomas H. Allen in the practice of Plastic Surgery at 413 North University in Little Rock since July 1972.

Dr. Harry Herbert Robinson

Dr. Harry H. Robinson is a native of Atlantic, Iowa. Dr. Robinson received his pre-medical education at Creighton University, Omaha, Nebraska; the University of Nebraska at Lincoln, and the University of Nebraska College School of Medicine at Omaha. He was graduated from the University of Arkansas School of Medicine in 1927. Dr. Robinson is a Charter Fellow of the American Academy of Family Physicians. From 1929 until 1972, Dr. Robinson was practicing in Cleveland, Ohio. He is now located in North Little Rock, Arkansas.

Dr. Phillip Lance Smith

Dr. Phillip Smith was born in Mountain View, Arkansas, and attended the University of Arkansas at Fayetteville. In 1966, he was graduated from the University of Arkansas School of Medicine. He interned at the University Medical Center in Little Rock and remained there for his residency work in Radiology. Dr. Smith is Board Certified by the American Board of Radiology and he holds a membership in the American College of Radiology. He is with the Department of Radiology at the University of Arkansas Medical Center in Little Rock.

Dr. Robert M. Stainton, Jr.

Dr. Robert M. Stainton, Jr., was born in Greenville, South Carolina. He received a B.S. degree from the University of Arkansas at Little Rock and in 1971 he was graduated from the University of Arkansas School of Medicine. Dr. Stainton is a resident in Pathology at the University of Arkansas Medical Center in Little Rock.

Dr. Eugene Jonas Towbin

Dr. Eugene J. Towbin is a native of New York, New York. Dr. Towbin received his pre-medical education at New York University at New York, the University of Colorado at Boulder, and the University of Rochester, Rochester, New York. In 1949, he received a M.D. and a Ph.D. degree from the University of Rochester School of Medicine. He completed his internship at Duke University Medical Center at Durham, North Carolina, and he also had residency training in medicine at the same institution. He holds a membership in the American College of Physicians and the Society of Nuclear Medicine. Dr. Towbin's office is located at 300 East Roosevelt

in Little Rock. He is Board Certified by the American Board of Internal Medicine and serves as Associate Dean and Professor of Medicine and Physiology at the University of Arkansas School of Medicine.

**Dr. Rass Lemuel Johnson**

Dr. Rass L. Johnson of Blytheville died April 20, 1973. He was born in 1888 at Ethel, Mississippi.

A 1914 graduate of the University of Tennessee College of Medicine at Memphis, Dr. Johnson practiced in Bassett, Arkansas, from 1918 until 1949 when he moved to Blytheville. He practiced in Blytheville until his retirement several years ago.

Dr. Johnson was a Life Member of the Arkansas Medical Society, the American Medical Association and the Mississippi County Medical Society. He was a past president of the Shawnee School Board and was an elder of the First Presbyterian Church.

He is survived by his wife, Mrs. Mary Ellen Moore Johnson, two sons, seven daughters, two brothers, and twenty-four grandchildren.

Dr. James B. Rice

Dr. James B. Rice of Pine Bluff died April 3, 1973, at the age of fifty-one. Dr. Rice was born at Humphrey, Arkansas, on November 26, 1921.

He attended Arkansas State University at Jonesboro and was graduated from the University of Arkansas School of Medicine in 1952. He was in the general practice of medicine for approximately two years in Hazen, Arkansas, before he began residency training in Anesthesiology at the University of Arkansas Medical Center. Following completion of his training, Dr. Rice moved to Pine Bluff where he practiced until his death. He was a member of the Arkansas Medical Society and the Jefferson County Medical Society.

Dr. Rice is survived by his wife, Mrs. Kathryn Bryant Rice.

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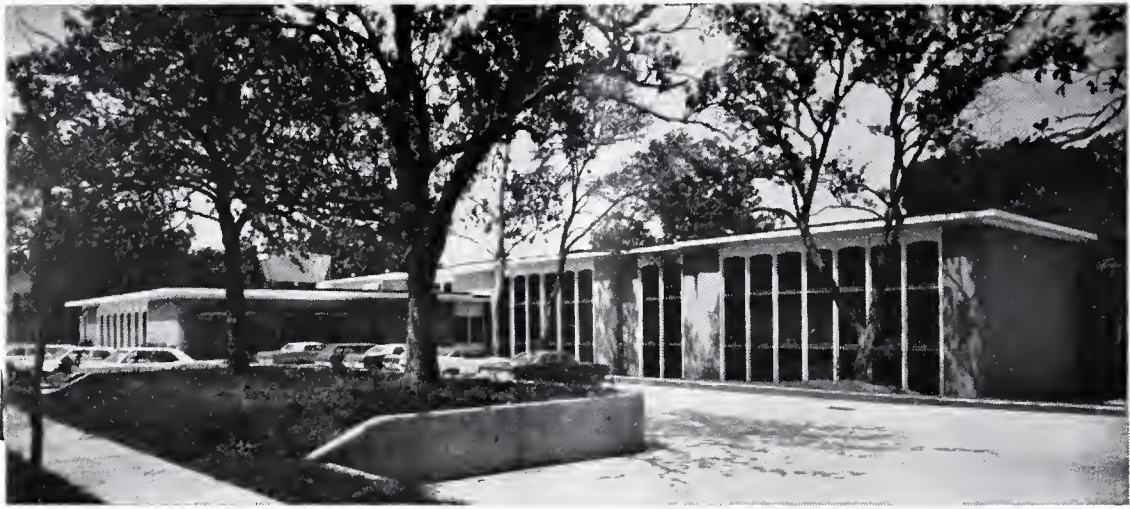
NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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The Rehabilitative Management of Lower Extremity Amputees

John H. Bowker, M.D.*

There are four major reasons for lower extremity amputations in the United States today. They are: congenital limb deformities which impair function, devastating trauma and its residuals, tumor and ischemia due to peripheral vascular disease. The latter constitutes eighty-five percent of all lower extremity amputations.¹

Rehabilitation of the lower extremity amputee consists of restoring his ability to walk independently with a prosthetic limb or limbs. However, there are a number of determinants of prosthetic limb ambulation in the ischemic and often geriatric amputee. While these include the individual's general vigor, motivation and intelligence, the single most important factor is the level of amputation. This is because of the much greater energy demand made on the wearer of an above-knee, as compared to a below-knee, prosthesis.

Considering the above statements, the following conclusions have considerable validity. Almost all unilateral below-knee amputees, including geriatric ones, can become functional walkers with one cane within two to three weeks of fitting. The majority of bilateral below-knee amputees can become functional walkers using one or two canes within four to five weeks of fitting. This also includes geriatric patients.

As one moves to the above-knee level, the prospect of ambulation rapidly diminishes. In the case of unilateral above-knee amputation, published figures^{2,3} indicate that only about thirty to fifty percent of patients become successful walkers, with almost none in the geriatric group. Functional walking with standard bilateral above-knee prosthesis is rare but a few can manage short, non articulated limbs called "stubbies." Only a few patients can manage the combination of bilateral below-knee-above-knee prosthesis successfully because of the agility required to manage two different types of leverage systems, especially if the second amputation occurs before

they have mastered the use of one prosthesis.⁴

From the preceding comments it is clear that retaining the knee joint is of great importance in prosthetic ambulation. This is true for several reasons. The below-knee stump affords easier gait training and balance because the gait pattern is very similar to normal. Better control of the prosthesis is afforded because the below-knee prosthesis is much lighter and less complex than its above-knee counterpart. The below-knee stump moves the smaller, lighter prosthesis with much less energy expenditure, a factor especially important in geriatric patients who often have diminished cardiopulmonary reserve. Lastly, even without a prosthesis, the knee is helpful in turning in bed and transferring from bed to chair.

The key question is whether a consistent effort to save the knee in patients presenting with ischemic disease will be rewarded by a significant number of viable, functional below-knee stumps.

One early prospective study of this question was done by Silbert⁵ who was stimulated by a retrospective report of 1,242 above-knee amputations done between 1916 and 1932. This report by the New York Academy of Medicine, disclosed a 44 percent mortality. By doing below-knee instead of the more shocking above-knee operation, Silbert reported an operative mortality of only 9.4 percent. Most surprising, however, was that only three of his 127 cases required a secondary above-knee amputation despite the fact that most patients had no popliteal pulse and some had no femoral pulse. Silbert's expanded series, published in 1954,² consisted of 331 below-knee amputations with a mortality rate of 4.4 percent and re-amputation rate of 3 percent. Several other studies have led to similar conclusions.^{3, 6, 7, 8}

A large recent study was reported by Sarmiento in 1970.⁹ This covered 625 amputations done between 1960 and 1968. The patients were di-

*Associate Professor, Division of Orthopaedic Surgery, University of Arkansas Medical Center, Little Rock, Arkansas.

vided into two groups. The first group consisted of those operated upon from 1960-1963 and the second group of those operated upon from 1964-1968. They were fairly evenly matched as to numbers (297 and 328), percentage age over fifty (approximately 70 percent), percentage amputated for peripheral vascular disease (83 percent) and percentage of diabetics (49 percent of the first group and 59 percent of the second).

The two groups had the level of amputation selected by quite different criteria. In the earlier group, relative certainty of wound healing was sought by sacrificing the knee, going immediately to the above-knee level, in the absence of femoral or popliteal pulses. The latter group had the amputation level selected on the basis of skin condition distal to the knee, rather than the presence of pulses. This approach is known to entail a relative risk of delayed healing or the necessity of revision at the below-knee level or higher, with the potential benefit of functional walking if it succeeds. The results were startling: Above-knee amputations fell from 69.3 percent to 17 percent, below-knee amputations rose from 28 percent to 68 percent and Syme amputations rose from 2.7 percent to 15 percent. The conversion rate of below-knee and Syme amputations to above-knee level fell from 46 percent to 7.5 percent, possibly a reflection of more careful surgical technique as well as a willingness to await healing by secondary intention when necessary.

Most importantly, the percentage of patients successfully reambulated with a prosthesis increased from 19 percent to 64 percent. All this progress coincided with the organization of a formal amputation service in 1964.

A detailed survey of fourteen Veterans Administration hospitals³ further pointed up the fact that individual hospital policy can make a great difference in the rehabilitation potential of amputees. The percentage of below-knee amputations for ischemia performed at the various facilities ranged from 80 percent to zero. Prosthetic walking at discharge varied from 63.6 percent to zero, also depending on the policy of the individual facility.

If the patient is not to be discarded with the leg, it seems clear that the amputation surgeon must develop or have access to and utilize a system for amputee rehabilitation. Such a program should include preoperative, operative and post-operative phases.

PREOPERATIVE PHASE

A tentative decision as to amputation level is based primarily on the condition of the skin below the knee. Adverse signs include excessive coolness, mottling, diminished sensation and atrophy manifested by poor texture and absent hair. The absence of pulses in itself is not a contraindication if the skin at the proposed level of section is well nourished.

If dry gangrene is present, a distinct level of demarcation is awaited. If foot infection cannot be adequately controlled by local drainage, debridement and suitable antibiotics, an open supramalleolar or open below-knee amputation can be done as an initial procedure.^{10,11,12} This is preferable to the use of ice which may damage viable proximal tissue. While waiting for surgery, the patient can be building arm strength, preserving joint range of motion and learning to walk with crutches instead of becoming further deconditioned by often unwarranted bed rest.

OPERATIVE PHASE

Unless it is clearly evident that an above-knee amputation is necessary, as in gangrene to the knee or uncorrectable recent major thrombosis or embolism, the limb is prepared and draped so that amputation can be done at either level as indicated by operative findings. A tourniquet may be in place but is not inflated unless necessary to control bleeding.

Any bleeding of the posterior flap at the below-knee level is an indication to proceed at that level. After completing the flap incisions, the muscle is incised and inspected. If the posterior muscles are of normal color, even in the absence of active bleeding, the wound will probably heal. A large posterior skin-fascia-muscle flap, as compared to an anterior flap, affords a far better chance of healing an ischemic below-knee stump because of its more adequate blood supply.

A myoplastic closure is done in all below-knee amputations except in the presence of infection or severe ischemia. It consists of suturing the posterior myofascia to the anterior periosteum to restore normal resting length of muscles, giving better proprioception, better stump contour and decreased incidence of painful phantom limb. If an above-knee amputation is indicated, myoplastic repair has similar advantages.

Occasionally poor skin precludes making a five to six inch stump in the ischemic limb.

However, with modern fitting methods a three to four inch stump is practical and far superior to an above-knee level in terms of function.

POSTOPERATIVE PHASE

Recently, widespread interest has developed in the technique of immediate postoperative fitting of a temporary prosthesis as first performed by Berlemont in 1958.¹³ Well executed prospective studies^{8,9} in this country have shown that all below-knee stumps closed at the time of amputation can benefit by rigid plaster dressing in several ways. Healing is directly aided by tissue immobilization which decreases shear forces between the skin-fascia-muscle flap and bone. Post surgical edema is minimized and stump shrinkage time is decreased. Because the plaster socket comes above the knee, flexion contractures of this joint cannot occur. Lastly, the stump is comfortably protected from most outside trauma.

If surgery is necessitated by ischemia, application of a complete temporary prosthesis including pylon and foot is delayed until wound healing has occurred, usually at two to three weeks.

If amputation is done for reasons other than ischemia, a properly aligned pylon and foot are added at the time of surgery. Supervised partial weight bearing may be started the day following surgery.

There are three benefits of immediate weight bearing in the non-ischemic amputee. The first is rapid stump shrinkage which can result in fitting of a definitive prosthesis as early as eight weeks after amputation. The second is the early development of proprioceptive function of the stump and the third is the muting of the feeling of one-leggedness, a distinct psychologic benefit.

SUMMARY AND CONCLUSIONS

Eighty-five percent of all lower extremity amputations are done as a result of peripheral vascular disease. Biomechanical and physiological considerations discussed indicate that amputees are much more likely to successfully use a below-knee prosthesis than an above-knee prosthesis. Even non-walkers with below-knee amputations find the knee helpful for self care in bed and in transfer activities.

The fundamental question is whether a consistent effort to save the knee in patients with ischemic disease will result in a significant percentage of functional below-knee stumps. Evidence from several studies indicates that rehabilitative management consisting of preoperative, operative and postoperative phases can re-

sult in a greatly increased percentage of functional post-amputation walkers. Such a program has been shown to be worthwhile even though delayed wound healing may occur or stump revision sometimes be needed.

The concise conclusion of Murdoch¹⁴ is apropos: "If the surgeon's sole objective is the certainty of primary wound healing, then the patient's aspirations in terms of ambulation may be frustrated."

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Case History—Liver Abscess Probably Amebic— Demonstrated on Liver Scans

A. E. Andrews, M.D.*

This 68-year-old white male physician was admitted to the hospital on 7-22-69, with chills and fever, sweats and weakness. A chest x-ray revealed right lower lobe pneumonia, and he was given antibiotics. The pneumonia cleared, his temperature returned to normal, and he was discharged from the hospital after twelve days.

On 9-26-72, he was again admitted with the same complaints, and an admission diagnosis again of right lower lobe pneumonia. This was again present on x-ray. Sinus x-rays were negative. Sputum studies were negative; the patient was given antibiotics. The fever remained intermittent while in the hospital, but after ten days, the fever had returned to normal, and the patient was discharged. On 10-11-69, he was re-admitted to the hospital with the same complaints and a right lower lobe pneumonia again was demonstrated on the x-ray. A bronchogram was done and, other than the changes due to the pneumonia, nothing abnormal was demonstrated. A liver scan was done on this admission (figures

1 and 2). On the supine scan, an enlarged liver was demonstrated with suggestion of a mass lesion in the lateral portion of the right lobe. A lateral scan was done with the right side up, and this demonstrated a large space occupying lesion in the middle of the right lobe of the liver. This was thought to represent a liver abscess, although a neoplasm could not be excluded. The patient was started on antiamebic drugs, Loridine and Aralen. After one week, on 11-4-69, the patient's symptoms had almost completely cleared, and a repeat liver scan was done (figures 3 and 4). This liver scan appears normal on the supine view, but the space occupying lesion is again noted on the lateral view, but is much smaller in size. Marks were made on the skin while the scan was being made to localize the area for a needle biopsy of the liver. The physician patient and his doctors decided, however, not to have the needle biopsy performed. The patient then was discharged from the hospital with a diagnosis of liver abscess, probably amebic. His past history was then reviewed for a

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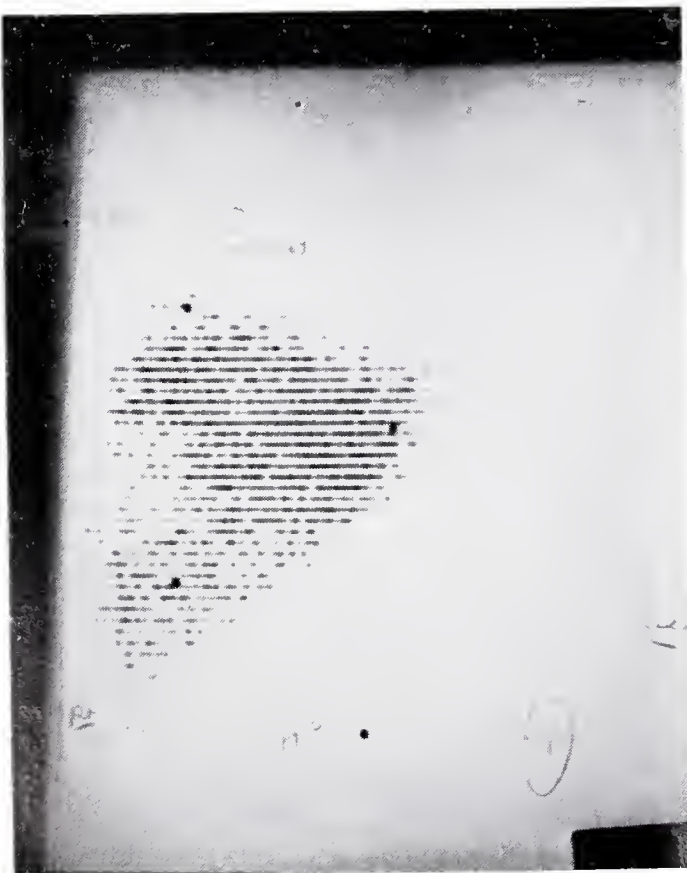


Figure 1.

Liver Scan — Supine. Decreased radioactivity is noted over the lateral portion of the right lobe. The liver is enlarged.

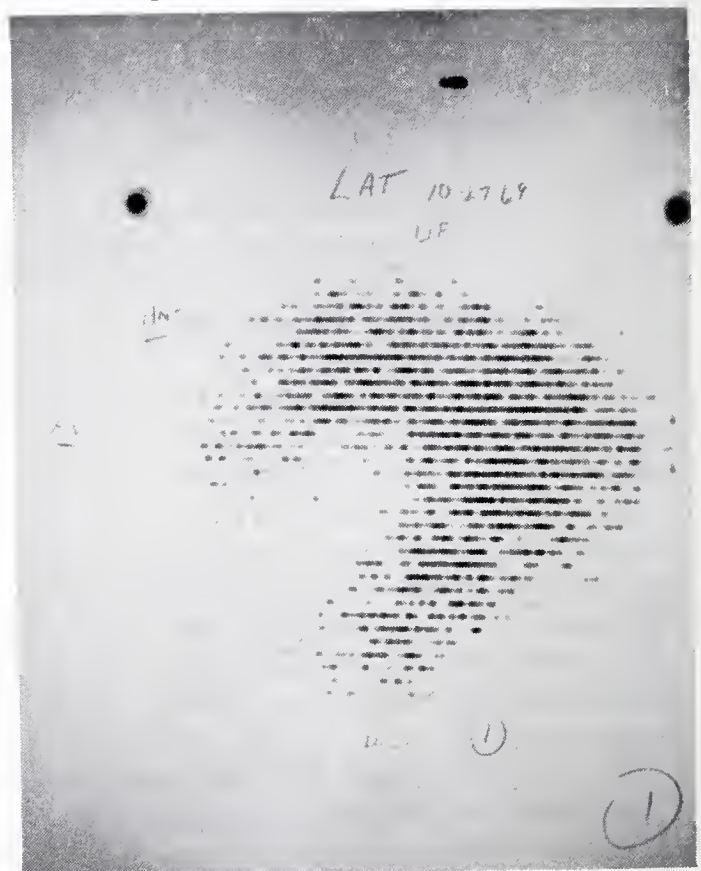


Figure 2.

Liver Scan — Right side up. A large lesion is noted in the middle.

possible source of the infection, and the only thing in the history suggesting exposure to amebiasis was a visit to Mexico and New Orleans fifteen years before. The patient left the hospital completely free of symptoms on 11-5-69, and has had no further symptoms relating to this. An additional liver scan was done on 12-16-69 (figures 5 and 6) approximately six weeks after discharge from the hospital, and on

this scan, there is only a very small questionable area at the site of the previous abscess, and without prior history, the scan would be reported as normal.

COMMENT: This case history confirms that liver disease can cause pneumonia and liver scanning can be very helpful in many cases where there is fever, weakness, and other general symptoms with the exact etiology obscure.

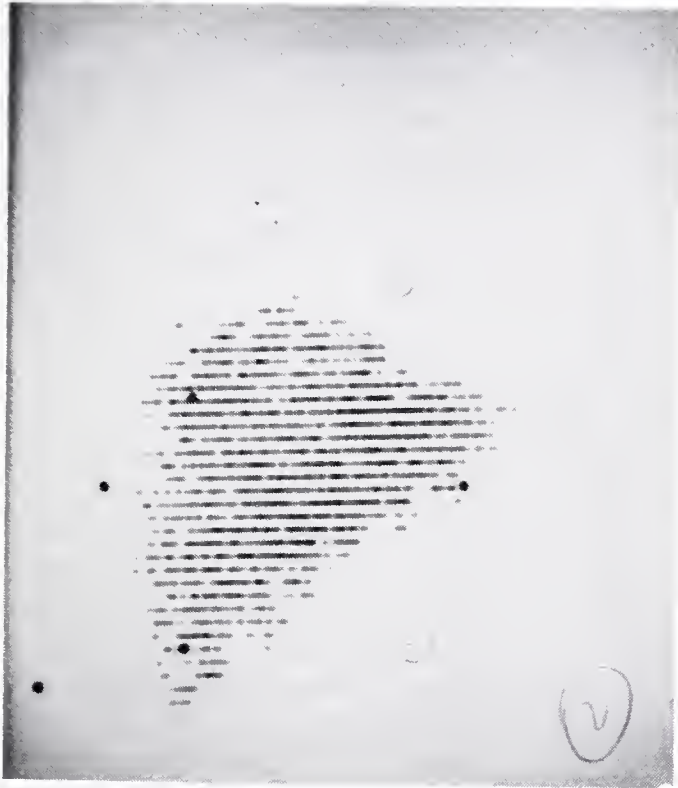


Figure 3.
Supine Liver Scan — A normal appearing scan.

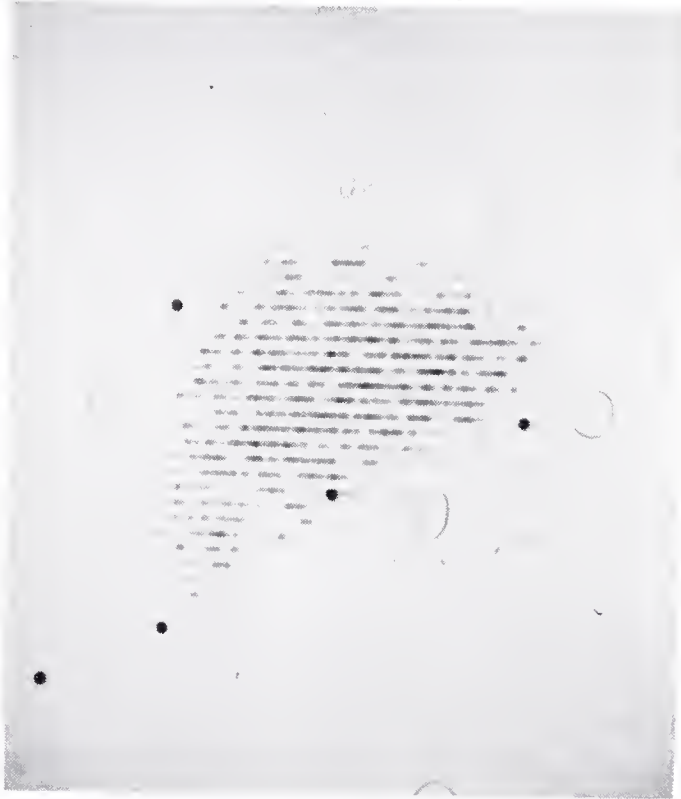


Figure 5.
Supine Liver scan. Normal.



Figure 4.
Lateral Liver Scan — The lesion is smaller. The round black dots correspond to marks on the skin for localization for a needle biopsy.

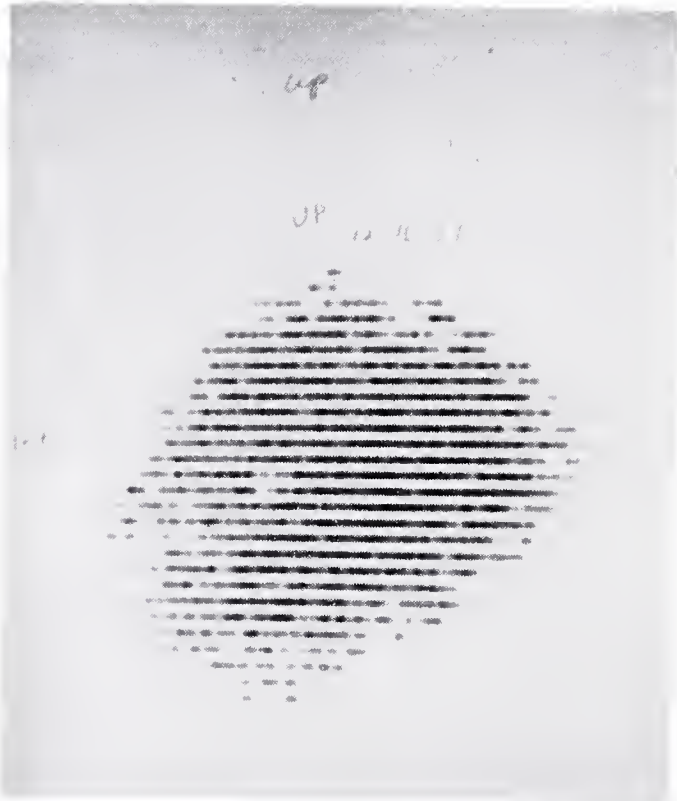


Figure 6.
Lateral Liver Scan. Normal.

Depression

Robert F. Shannon, M.D., and Joe T. Backus, M.D.*

The term "depression" has many meanings in medical and psychiatric practice. As used by patients and physicians it may describe any condition from a mild down swing in mood which is transitory and relatively "normal", to a severe psychotic illness with manifest psychological and physiological pathology. The former condition would require little or no medical attention while the latter might require hospitalization and specific psychiatric treatment. Depression, then, can be viewed as a biological illness, as a reaction to life situations, and as a posture of interpersonal communication.¹ Proper medical management requires accurate assessment of findings, correct diagnosis and definitive treatment. The aim of this paper is to help clarify these aspects of depression.

Since the advent of the shock therapies in the thirties and the antidepressant drugs in the late fifties, there has been increasing interest and research focused on all aspects of the depressive illnesses. Psychological studies have focused on differentiating the "neurotic" from the "psychotic" depressions, the "endogenous" from the "exogenous", and "agitated" from the "retarded".² Several "depression scales" have been devised to aid both in diagnosing and in evaluating treatment progress.^{3, 4, 5} Genetic studies have produced concepts of "unipolar" and "bipolar" affective disorders and are exploring families of depressives over several generations.^{6, 7, 8}

Physical and physiologic studies have shown changes in nerve conduction,⁹ corticosteroid utilization, and in the metabolism of serotonin, noradrenalin and other neuro chemicals.¹⁰ Sleep research has shown quantitative as well as qualitative changes in the sleep of some types of depressions and of the effectiveness of various sedatives, hypnotics and psychoactive drugs on dreams, REM, the quality of sleep and the effect on the course of depression.^{11, 12, 13}

In the treatment aspects of depression, there are new antidepressant drugs, new modifications of shock treatment,^{14, 15, 16} new forms of "attitude therapy" and a healthy re-examination of psychotherapeutic techniques.^{17, 18} Paykel has proposed a classification of depression which offers

some hope of leading to more specific uses of therapeutic tools.²

Sociological studies show that depression is widely dispersed throughout all economic classes, races, religious sects, age groups, geographic regions, etc. Depression is one of the most common illnesses afflicting mankind. The cumulated life risk of developing a depression is probably 9-18%.¹⁹ Depression is the largest cause of suicide.²⁰

Clinical Aspects

Depression occurs most often in the fourth and fifth decades of life but may occur in any and are very common at particularly stressful times of life (adolescence, childbearing period, involutional period, during senescence). Onset may be insidious or precipitous and while the duration may vary from as short as a few days to as long as many years, most depressions will last from three and one-half months to thirteen months.²¹ Depression will occur twice as often in females as males, three times as often in higher socioeconomic classes and four times as often in professional groups.²² Most clinical depressions (50 to 80% depending on type, severity, etc.) respond well to either electric shock therapy or to antidepressive medication. Whether these favorable responses are indicative of a real "cure" or are primarily symptomatic is yet to be determined. These responses are such, though, that every physician should be familiar with these drugs and with the depressive symptomatology. In order to do this, he must be able to recognize depression and then to fit the treatment to the specific symptoms.

Signs and Symptoms

Whether depression is a disease entity, a symptom complex, a specific reaction to some type of stress, or all of these, is not clear. There are certain signs and symptoms, however, which are fairly clear and which constitute a clinical picture. These can be divided into the following symptom groups.

1. *Sad affect* — this is easier to recognize than it is to describe. Generally, a depressed person looks "sad". His facial expression is either pained or without expression. (There are some so-called "smiling" depressions but the "smile" doesn't really mask the underlying mood). He is de-

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spondent, may complain of being depressed, sad, blue, down in the dumps. His movements may be slowed, posture stooped, carriage poor. After a time, he shows less interest in his personal appearance and may be unkempt.

2. *Painful thinking* — this becomes apparent upon talking to the patient. His thinking processes may be slowed, he seems apathetic to things around him, he ruminates over certain thoughts. He is introspective and self-possessed. He is likewise introjective and seems to take onto himself blame for all sorts of wrongs, real or imagined, big or small, recent or remote. He expresses self deprecatory ideas, feelings of worthlessness, hopelessness and futility. Suicidal ideas have most likely occurred to him. Although he may not express it, he will generally have a great deal of hostility, especially toward those closest to him, and may in turn express great guilt for his hostility. Guilt, in fact, permeates the thinking of a depressive.

3. *Psychomotor retardation* — vital signs are decreased. Overall body movements are slower and labored. Fatigue is present. An over concern with body functions is frequently seen. Appetite — even though some keep eating or overeat, there is decreased interest in and enjoyment of food. Anorexia with recent weight loss is seen in the majority of cases (but a few overeat). Menstrual irregularity, sexual disinterest, or impotency are common. Constipation is frequent but diarrhea may be present in some cases. Psychophysiologic illnesses of all sorts can be present and may sometimes be the presenting complaints. Hypochondriasis is common and, in fact, may be so apparent that the busy physician may see the patient as a “crock” (i.e., a whiney griper who really isn’t sick) and totally miss the real treatable underlying depression. Headache is a frequent complaint. Insomnia is practically universal and may be of either early or late type (i.e., he may either have trouble going to sleep or staying asleep or both) but most commonly is of the late type wherein the patient has little trouble falling asleep but awakes during the night and then cannot go back to sleep. Quality of sleep is poor. In an early depression, some patients oversleep. Many patients, by the time they seek help, may be abusing drugs or alcohol.

4. *Anxiety, hyperactivity and agitation* may be present and, when present, reverses many of the symptoms described above. Such patients

have increased vital signs, they move excessively, and have an increased number of physical complaints. They are more active and may thus be more likely to suicide.

5. *Distorted thinking* is found in some patients. This differs from “painful thinking” only in degree but goes into the realm of unreality. Such a person will have ideas of reference and/or delusions (usually of persecution and frequently of a sexual nature) and/or hallucinations. Hallucinations, when present, are auditory.

Clinical Entities

Several combinations of the above symptoms groups are seen in practice.

1. Psychoneurotic depression is the most common: To make this diagnosis, groups 1, 2 and 3 *must* be present. If elements of all three are not found, then some other diagnosis is called for. The different “types” of this reaction will be discussed under dynamics.

2. “Agitated” depression (not an officially accepted term but commonly used) consists of 1, 2, 3 and 4. The anxiety may be the most dominant aspect and may mask the depression in some instances.

3. A psychotic depression has elements of 1, 2 and 3, with or without 4 plus 5. The psychotic depressive is usually a suicidal risk and may require hospitalization. The most classical psychotic depressives are the involutional depressive psychoses. The schizoaffective depression, a basically schizophrenic disorder with a superimposed depression, would likewise belong here. The manic-depressive psychosis, depressive type, would also fall into this category.

These three illnesses have in common the symptom groups: sad affect, painful thinking and psychomotor retardation. They include, in fact, all the clinical entities which can legitimately be classed as “depression.” Other conditions exist which present one or two of the above symptoms groups but these are not, strictly speaking, depressions and will not respond favorably to antidepressants or to EST.

Differential Diagnosis

The most common conditions leading to confusion in diagnoses are:

1. Grief reaction — a normal response to loss of a loved one or love object. Onset follows directly with the loss. Sad affect is predominant with some degree of painful thinking. Duration brief — may be several days to weeks. Generally

if grief lasts beyond this period, a depression *has* developed. Grief reactions per se do not respond to antidepressants and are better managed by sympathetic understanding and support, letting the patient cry and talk out his feelings, some reassurance and sedations the first several nights.

2. Acute Situational Reactions are sometimes very similar to depressions. The symptomatology is very similar but the painful thinking is ordinarily not present. Although these patients may be quite panicky, their basic problems are found to be primarily environmental and once the environmental adjustments are made, the reaction subsides. Acute anxiety is usually the most obvious and aggravating symptom and may require short-term treatment with one of the minor tranquilizers (Librium, Vistaril).

3. Schizoid personality: a personality type, which, due to aloofness, social withdrawal and apathy, may be confused with a depressive reaction. The lifelong pattern of the disorder differentiates it from depression but at times the two may be very similar and, of course, a person with a schizoid personality can also develop a depression. A person with chronic schizophrenia may likewise present this picture when his psychotic symptoms are masked or in remission.

4. Passive-aggressive personality: both the passive-dependent and the passive-aggressive types may manifest some depressive features. At times the passive-dependent will present with a sad affect and with a whining dependent type of painful thinking. He may be apathetic and non-productive and may be slow and lazy but he does not show overall psychomotor retardation nor is his thinking as self-deprecating as the depressives. These people, in particular, should not be given any type of antidepressant or stimulant as their personalities make them very prone to habituation. Overeating, as well as oversleeping, is common. This personality type is particularly vulnerable to depression when stressed sufficiently but the clinical picture then changes to a more typical one.

5. Inadequate personality, sociopathic personality—these may seem sad and may talk in a self-deprecating way, usually when under pressure, but it is for manipulative reasons and does not represent true depression. No known successful treatment is available for these conditions.

6. "Hysterical" and "hypochondriacal" patients may present depressive symptoms but the

chronicity of their overall condition, along with the fleeting nature of their purely depressive symptoms, make differentiation fairly simple. Many depressives, however, may also have hysterical and hypochondriacal features so careful evaluation is necessary.

7. Other conditions which may need to be differentiated from depression are: physical illnesses which as a part of their signs and symptoms present with fatigue, weight loss, etc.; organic brain disease may need to be considered when a patient is mute or stuporous which severely depressed patients sometimes are; and catatonic withdrawal. With sufficient history, physical examinations and appropriate lab procedures, these can be distinguished from depression. Any illness, however, can be seen in a patient who is also depressed and many times depression occurs concurrent with physical illnesses. Proper medical care will require that the depression be treated whenever it occurs.

Summary

The term "depression" has many meanings in both lay and medical usage. These many meanings interfere with the recognition and treatment of those actual illnesses which also are called "depression." This article attempts to define depression as an identifiable illness (or perhaps group of illnesses) which has as its essential symptomatology the three aspects of sad affect, painful thinking and psychomotor retardation. Other conditions which may resemble depression are discussed and differentiated from depression. Such differentiation and exact diagnosis is quite important in the clinical course and treatment as will be seen in two subsequent articles on the psychodynamics and the treatment of depression.

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Tartrate-Resistant Acid Phosphatase Isoenzyme in Reticulum Cells of Leukemic Reticuloendotheliosis

L. T. Yam, C. Y. Li and K. W. Lam (Children's Hosp, Boston 02115)

New Eng J Med 284:357-359 (Feb 18) 1971

Acid phosphatase activity in the reticulum cells of leukemic reticuloendotheliosis is quantitatively and qualitatively different from that in the lymphosarcoma cells of lymphosarcoma and in lymphocytes of chronic lymphocytic leukemia. Enzyme activity in the reticulum cells is strong and tartrate-resistant while that in the lymphoid cells of the other two diseases is very weak and is inhibited by tartrate. A combined cytochemical and electrophoretic study indicates that this tartrate-resistant enzyme activity represents isoenzyme 5. It is present almost exclusively in the reticulum cells and not in other hemic cells in leukemic reticuloendotheliosis. It is not present in the lymphoid cells in lymphosarcoma or chronic lymphocytic leukemia. It may be used as the marker enzyme to diagnose leukemic reticuloendotheliosis and to trace the origin of the reticulum cells ("hairy cells") in the reticuloendothelial system.

Evaluation of Exercise Therapy Program for Patients With Chronic Obstructive Pulmonary Disease

J. J. Nicholas et al (401 E Ohio St, Chicago)

Amer Rev Resp Dis 102:1-9 (July) 1970

Fifteen patients with chronic obstructive pulmonary disease were admitted to an outpatient exercise therapy program, planned as a three-month control period and a six-month exercise therapy period. Seven of the 15 dropped out before completing the project. Four of the eight who completed the project showed considerable gain in exercise tolerance; the other four showed much less or no improvement. Pulmonary function did not change significantly. Most improvement occurred in the first half of the study. The ideal subject for such a program should have moderate or severe disability, no carbon dioxide retention, no other illnesses, and a high degree of motivation. The formal exercise program can be only a few weeks long, but arrangement should be made for continued home exercise. The benefits of a completed exercise program include increased subjective feelings of well-being and confidence and the objective ability to accomplish modest, previously impossible tasks.



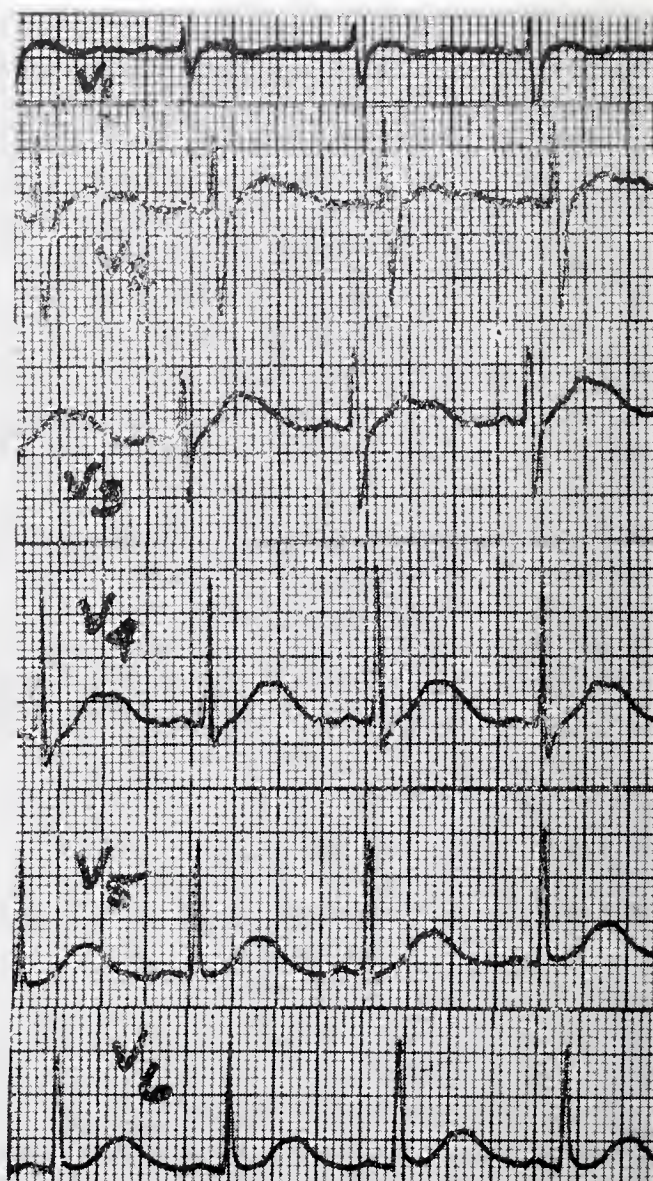
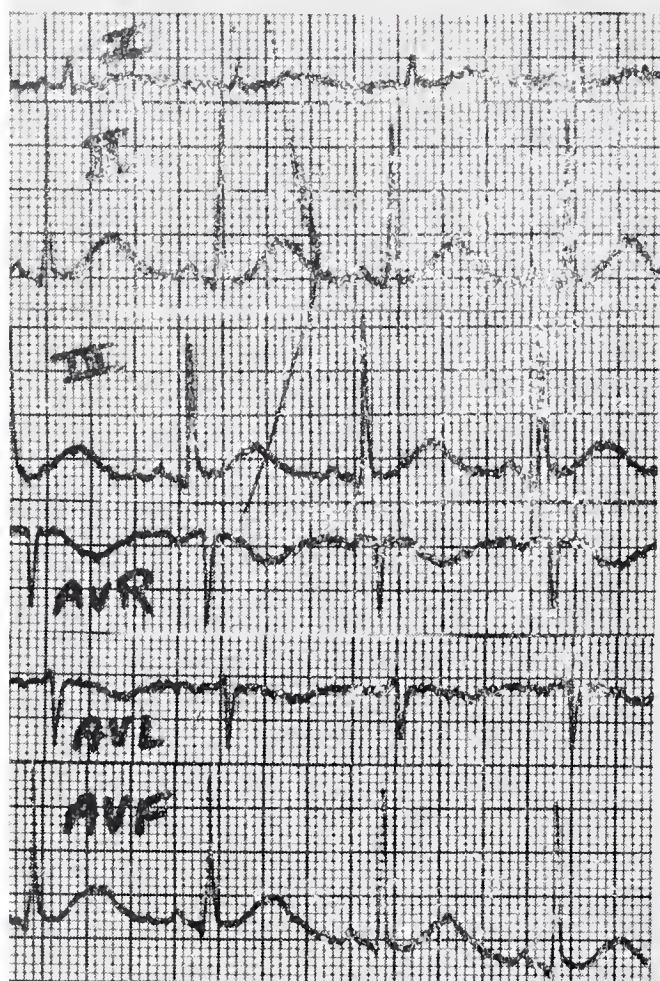
ELECTROCARDIOGRAM

OF THE MONTH



The Department of Cardiology, University of Arkansas Medical Center

(See answer on page 94)



50-year-old white female who lives alone and was found semi-comatosed by neighbor.

John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
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Vector Control in Arkansas

Robert L. Robinette*

The control of vectors of disease should be an essential public health program in the State of Arkansas. By definition, vectors, in communicable disease terminology, are "arthropods or other invertebrates which transmit infection by inoculation into or through the skin or on food or mucous membrane by biting, or by deposit of infective materials on the skin or on food or other objects." This definition has generally been expanded to include many vertebrates, such as rodents.

Vectors have had a profound influence on man throughout recorded history, due to the many diseases they spread. Vectors are known to be involved in the biological transmission of at least 20 diseases and the mechanical transmission of many others. History is filled with accounts of instances where vectors have been the scourge of humanity, being responsible for such pestilences as Plague or "Black Death", Yellow Fever, Malaria, and Typhus. The Greek physicians of the fifth century, B.C., were very familiar with malaria. Hippocratic writings are full of accounts of malarial fevers. These writings indicate that these physicians observed the periodicity of these fevers; they noted the seasonal character of the disease and that wet springs and dry summers brought an increase in these fevers. These writers even noted the association between marshes and malaria. They thought, however, that the fevers were caused by drinking swamp water. According to some sources, one fourth of the world's population died from Plague during one decade — the 1340's.

In Philadelphia in 1793, a yellow fever outbreak caused 4,044 deaths — this was a fatality rate for the epidemic of 15-20 percent. Public health in many states, Arkansas included, was a result of some vector related epidemic; yellow fever in the case of Arkansas. A major yellow fever epidemic occurred in New Orleans, Louisi-

ana, in 1869. This prompted the State of Massachusetts to establish the first State Department of Health.

Some of the earliest efforts to combat vectors and vector-borne disease occurred in the State of Arkansas. One of the earliest efforts to combat malaria occurred in 1915 in Arkansas. This was a successful cooperative project involving the International Health Division, the Public Health Service, and the State and local health departments in southern Arkansas. In 1916 the first Public Health Service — Rockefeller Foundation cooperative mosquito control effort occurred in Crossett, Arkansas. As a result of these efforts, malaria patients seen by physicians dropped from 2,100 during the last six months of 1915 to 310 for the same period in 1916. Both of these projects approached the problem from a standpoint of control or prevention of the mosquito, rather than medical treatment.

In 1946 the National Malaria Control Program was begun as a cooperative enterprise of the Public Health Service and the various State Health Departments. This program was directed at breaking the transmission chain by attacking the mosquito. In 1948 some 1,365,000 homes across the U. S. were sprayed with D.D.T. At the beginning of the program, about 30,000 cases of malaria occurred yearly in the U. S. At the start of this program, 1,349 cases of malaria were reported in Arkansas. In 1950, only 48 cases were reported in Arkansas. There has been no proven local transmission since 1949.

As a result of organized efforts in environmental improvement, increased knowledge regarding the cause, treatment, and prevention of vector-borne diseases, and techniques to combat vectors themselves, the disease potential of the vector was diminished.

As has been the case many times throughout history, once a problem seemingly has been defeated, it resurges to again have a detrimental impact on human health; witness the nationwide

*Director, Division of Vector Control and Recreation in the Bureau of Consumer Protections Services, Arkansas State Department of Health.

epidemic of venereal disease. There appears to be several reasons for the increase in venereal disease, one of which is the increasing resistance to drugs by the causative organism.

This may well be the case with vectors. It is a well established fact that many insect species exhibit a tolerance for levels of pesticides that once were lethal. Perhaps the best example of resistance to a pesticide is the resistance of many insect species to D.D.T. Almost all species of insects now exhibit varying degrees of resistance to D.D.T.; while only a few years ago, this chemical was used to successfully control insects that affected man, his animals, and his crops. Paul Muller was awarded the Nobel Prize in Medicine in 1948 for his role in the discovery of D.D.T. as an insecticide. In the crop year 1958-1959, some 156 million pounds of D.D.T. were produced in the U. S. alone. This chemical was the primary reason for the dramatic reduction in malaria in Arkansas and the rest of the South in the mid and late 1940's. Now this chemical is almost useless for mosquito control.

Insect vectors are becoming resistant to an alarming number of insecticides that once gave excellent control, including many chlorinated hydrocarbon compounds and even to the newer organic phosphate compounds. In certain areas of California, some species of mosquitoes are becoming resistant to even such highly toxic insecticides as parathion.

The cause for resistance by certain insects to certain insecticides and the cause for resistance by venereal disease organisms to drugs once effective in control appear to be similar — misuse and over-reliance.

What does this resistance mean in Arkansas? It means that emerging populations of vectors may be resistant to conventional methods of control, this being largely chemical control. It means that vectors could again emerge to exert a significant impact on man.

The factors involved in a vector-borne disease outbreak are: an individual infected with the causative organism, a susceptible population, and the vector to carry the causative organism from the infected individual to the susceptible population.

The conditions in Arkansas are especially conducive to severe vector populations this spring. The recent floods have provided millions of acres of water in which mosquitoes can breed; some species being capable of disease transmission

and perhaps resistant to many insecticides. Increasing numbers of veterans, some infected with malaria, are returning from Vietnam, thus placing the causative organisms for malaria back into Arkansas. Thus, all of the necessary ingredients for a vector-borne outbreak of malaria are present. Landing rates and larvae counts, indices of mosquito population trends, are already high.

The World Health Organization has defined health as: "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity."

When major disasters or man's activities multiply breeding areas of mosquitoes or other pests so that a hundred grow where one grew before; when these multiplied numbers of insects inflict bites which result in serious allergic, traumatic, and infectious manifestations; when hordes of venomous insects interfere with man's necessary and desired activities; then the so-called pest insects have a health hazard significance beyond simple nuisance.

We should no longer look at health as "merely the absence of disease or infirmity." We should look upon health as "a state of complete physical, mental, and social well-being." Control of vectors should be a major objective of a comprehensive health program.

To accomplish this, a complete comprehensive program will be necessary. The mistakes of the past, such as misuse and over-reliance on chemicals, must be avoided. A comprehensive vector control program must involve bringing to bear upon the problem many of the proven control techniques, including biological, mechanical, and chemical control and engineering techniques. Education must be a major component of a vector control program. Major emphasis must be placed on preventing or reducing vector populations and breeding areas.

On January 1, 1973, a Division of Vector Control was established within the Bureau of Consumer Protection Services, Arkansas State Department of Health. The purpose of this Division is to provide educational, technical, and consulting services to the public upon request. In the future, when funding and personnel are provided, program activities will be expanded to offer actual assistance in the form of equipment, materials, and personnel to local areas which experience severe vector problems, such as may be expected as a result of recent flooding.



EDITORIAL

Liver Disease

Alfred Kahn, Jr., M.D.

Gastro-enterology has an interesting section entitled, "Liver Physiology and Disease".

In this section is a report from the Mayo Clinic concerning "Lupoid" hepatitis (*Gastro-enterology*, Vol. 63, page 458, September 1972). The thrust of the work was to determine whether or not "Lupoid" hepatitis was a unitary disease or if it was simply a variant of chronic active liver disease, which is characterized by progressive hepatic inflammation and necrosis. Eighty-eight patients with chronic active liver disease were studied. These patients showed histologic changes consisting of piece-meal necrosis and parenchymal infiltration of liver cells; some patients' liver specimens showed subacute hepatitis or cirrhosis. Biochemically, these patients had an elevated SGOT, gamma globulin and bilirubin. The patients were divided into four groups and given different programs. The authors then reviewed each group and found that a positive L E Cell test did not define any special type of chronic active liver disease. A positive L E Cell test was associated with a severer type of chronic active liver disease.

The Mayo Clinic group have also studied the treatment of chronic active liver disease in sixty-three cases; this was a progressive study. They were divided into three groups: Prednisone treated patients, Azathioprine treated patients, and patients treated with both drugs. Their results indicate that Prednisone with or without Azathioprine could induce clinical remissions, and, in fact, when large enough doses were used, there was a disappearance of all biochemical and immunological signs of disease. Azathioprine did not favorably affect chronic active liver disease. Soloway and his colleagues felt that the side effects of Prednisone therapy were minimal

in comparison to its benefits (*Gastro-enterology*, Vol. 63, page 820, November 1972).

Gall stones and their relationship to bile has been actively studied for years and it is apparent that there is a relationship between the composition of bile and gall stones. However, the subject of a recent short report was a series of studies to determine if hepatic bile composition changed after cholecystectomy for stones (Simmons, Ross and Bouchier, *Gastro-enterology*, Vol. 63, page 466, September 1972). Studying patients with cholesterol gall stones in which excessive cholesterol in relationship to bile salts and phospholipids in the bile has been incriminated as the lithogenetic factor. The authors found a difference in the bile before and after cholecystectomy. They plotted the composition of the bile on triangular graphs using the level of three chemicals as coordinates: cholesterol, bile salts, and phospholipids. After surgery, they found the composition of the bile had changed in a majority of the adequately sampled patients so that the cholesterol ratio to phospholipids and bile salts fell within the zone micellar solubility, thus altering it from a gall stone-forming type of bile.

Bleeding from esophageal varices is a frightening experience for the physician and patient alike. Surgery may be effective, but it can be hazardous. A non-surgical method of treating bleeding varices has been studied by Conn, Ramsby and Storer (*Gastro-enterology*, Vol. 63, page 634, October 1972). They used selective intra-arterial vasopressin. In massive gastro-intestinal hemorrhage, these authors performed arteriography as a diagnostic tool and a therapeutic tool. Of the thirty-five patients studied, ten had esophageal varices; to consider the vasopressin therapy suc-

cessful, the lesion had to be located and the bleeding stopped for twenty-four consecutive hours. The vasopressin could be continued for any period of hours. In these varices cases, vasopressin was infused into the superior mesenteric artery. Vasopressin controlled the hemorrhage in 79% of the bleeding episodes. Other cases reported in this paper included duodenal ulcers, stress ulcers, and gastric ulcers. It is of more than

passing interest that the vasopressin treated cases needed an average of only 2.3 transfusions for each bleeding episode, whereas cases untreated with vasopressin averaged 5.5 transfusions.

Progress in understanding liver disease parallels our progress in biochemistry, immunologic and histologic methods. These studies reflect some of our advancement in these areas.



MEDICINE IN THE



THE MONTH IN WASHINGTON

Federal health expenditures in the current fiscal year will exceed \$42 billion — an increase of \$2 billion over the previous fiscal year.

The report on *Federal Medical-Health Appropriations*, prepared by the American Medical Association's department of governmental relations, offers a unique view of the federal government's overall involvement in health and health related activities.

In most cases, supplemental appropriations for specific programs are not included, meaning that actual figures are higher than presented. The bulk of the report deals with appropriations, but a table also shows estimated spending this fiscal year on trust fund and other expenditures for disability in various programs including Social Security, Veterans Administration, military disability retirement and railroad retirement.

Considering appropriations alone, the total for the present fiscal year is \$28.3 billion, compared with \$26.5 billion the previous year. Federal Medicare expenditures of \$9.5 billion are included although \$6.6 billion come from the Social Security Medicare trust fund for part A or hospital benefits. The Medicare law requires these funds to be treated as appropriations by Congress.

The Health, Education, and Welfare Department, of course, leads the list in appropriations

— \$18.1 billion compared with \$17.6 billion the year before. In order come the Veterans Administration, \$2.9 billion; Defense, \$2.8 billion; Environmental Protection, \$2.3 billion; Federal Employees Health Insurance, \$604 million; Agriculture, \$362 million (animal and plant health inspection, etc.); State, \$258 million; and OEO, \$150 million.

In the non-appropriations area, Social Security payments to disabled workers were \$4.2 billion, service-connected VA disability payments were \$3 billion, non-service connected, \$1.5 billion.

* * *

The president of the American Medical Association filed a vigorous dissent to a federal Commission on Medical Malpractice report which blamed physicians and hospitals for much of the problem.

A central finding of the special commission was that injuries to patients, and not greedy avaricious contingency fee lawyers, are the reason for the increased number of malpractice claims. The report included about 100 findings and recommendations.

In his dissent, C. A. Hoffman, M.D., AMA president and one of the 21 members on the commission, said that the panel had failed in its primary purpose to come up with a program "calculated to ameliorate" the nation's malpractice problems. He said:

"The report does not appear to be calculated

to ameliorate such problems to any significant degree. Some of its recommendations, if implemented, would be likely to stimulate an increased frequency of claims. The increasing frequency and cost of claims has an unavoidable adverse effect on health care . . .

"The report fails entirely to identify the problems of medical malpractice claims as what they really are — a part of the much larger and more general problems of liability claims litigation. In the United States, people have always been quick to file lawsuits for any injury, real or imagined. The legal system encourages litigation. There is a definite trend in court decisions to make it continually easier for claimants to recover substantial damages, with less and less proof of fault.

"This trend is well established in all fields of activity including automobile liability, product liability, airline and rail liability, homeowners liability and all others. Malpractice liability is the most visible and harmful part of this trend, because it affects the vital area of health care.

"As a part of this trend certain legal doctrines

have been established which apply only in lawsuits against health care providers and which make it easier for claimants to recover damages with little proof of fault. These doctrines include: (a) the 'discovery' rule under the statute of limitations; (b) the application of the doctrine of *res ipsa loquitur* to injuries arising out of the performance of professional services; (c) the doctrine of 'informed consent' and (d) a rule allowing liability based on an alleged oral guarantee of good results. If this trend continues unchecked, the logical results will be that health care providers will be held liable for any unfortunate result arising from health care, even if there was no fault on the part of anyone and the result was entirely unavoidable.

"These legal doctrines are one of the most important causative factors for the problems of the increasing cost and frequency of malpractice claims. Instead of making a strong recommendation for appropriate and equitable remedial legislation, the report merely recommends referral of the legal doctrines problems, which it reluctantly admits exist, to some vaguely defined and presently non-existent group which is sup-



Dr. D. B. Stough (left) president of the Fifty Year Club, and Dr. G. Allen Robinson, Club secretary, display plaque presented by the Garland County Medical Society to Dr. W. G. Klugh, Sr.

posed to develop recommendations for uniform rules of law, 'in the nature of a Restatement of the Law of Medical-Legal Principles.' This is inadequate as a remedy for this major problem.

"I, like other physicians, affirm that any patient who is injured in the course of his health care as a direct result of negligence on the part of any provider is entitled to just and reasonable compensation. Where an injury occurs despite the best of care, however, health care providers should not be unjustly burdened with the cost of compensation. If they are, this inevitably adds to the cost of health care.

"The report gives the false impression that the rapid increase in the frequency and cost of claims has arisen from a deterioration in the general quality of health care. The reality is the frightening paradox that the general quality of health care has been improving dramatically at the same time that the frequency and cost of claims have been skyrocketing.

"The report stresses the obvious fact that there would be no claims if there were no injuries. Where surgery or potent drugs are required, the risk of injury is unavoidable. Only a small percentage of the injuries, however, are caused by the negligence of anyone.

"The report does contain some constructive recommendations. These include: (a) development of injury prevention programs, (b) study of alternative compensation systems, and (c) data collection, if limited by careful cost justification."

* * *

Malcolm Todd, M.D., chairman of the American Medical Association's Council on Health Manpower, has been appointed to the board of regents of the military medical school which was authorized by the last Congress.

Others named were: Durward Hall, M.D., former GOP Congressman from Missouri; Lt. Gen. Leonard Heaton, M.D., U. S. Army Ret.; Anthony Curreri, M.D., Wisconsin; H. Ashton Thomas, M.D., Secretary of the Louisiana State Medical Society; and former defense official David Packard. Three more regents remain to be selected.

* * *

A sweeping study has allayed the fear that this nation would become flooded with ex-GI drug addicts by finding that very few young soldiers

who took narcotics in Vietnam have continued their addiction in civilian life.

The study also presented information indicating the physical grip of heroin addiction may not be as strong as heretofore believed — "one half of all those who reported heroin dependency in Vietnam had withdrawn on their own."

Commenting on the \$400,000 study, Richard S. Wilbur, M.D., assistant secretary of defense for health and environment, declared:

"We now know that recovery from heroin dependency is not impossible; and that in the case of young, healthy, well-disciplined men in the armed services, rehabilitation will be successful in the majority of cases."

Dr. Wilbur compared the narcotic dependence rate of 1.3 percent among Vietnam returnees with the 1.2 percent of drug abusers identified in the civilian population of young draftees and recruits. He estimated the number of addicts of all Vietnam veterans at about 2,000 to 3,000 of the 313,000 enlisted men who served in Vietnam during the high use period in the last several years of the war. Little heroin was used prior to this by U. S. troops.

The study, prepared under the direction of Lee Robins, Ph.D., Professor of Sociology in Psychiatry at Washington University, was originated by the special White House action office on drug abuse and funded by the Defense Department, the Veterans Administration, the National Institute of Mental Health and the Labor Department. Some 900 enlisted men were interviewed.

Dr. Wilbur told a Pentagon news conference that there are many myths surrounding addiction. "I was taught that anyone who ever tried heroin was instantly, totally and perpetually hooked," he said.

"Treatment success rates were reported to be less than 5 percent. Therefore the use of methadone maintenance for all heroin addicts and even legalization of heroin seemed desirable to some advocates because it seemed impossible to get off heroin."

But the accumulating data being gathered by Defense in the wake of the Vietnam drug crises, including the latest report entitled "A followup of Vietnam drug users," has caused "us to re-examine the old beliefs more critically," said Dr. Wilbur.



Dr. and Mrs. G. Allen Robinson and Blue Cross-Blue Shield staff members Clyde Nevill, H. T. Gardner and Ron Yarbrough at the shrimp and beer party hosted by Blue Cross-Blue Shield on Monday evening of the Annual Session.



Dr. and Mrs. John P. Wood and daughter Kathy at the Monday evening party.



Mrs. John Guenther, Dr. and Mrs. Paul Wallick and Dr. J. B. Elders enjoy the shrimp at the Blue Cross-Blue Shield party.

The followup study said that only 7.2 percent of the men who had been detected as narcotic users in Vietnam had felt narcotic dependent at any time since their return. Dr. Wilbur pointed out that 93 percent of the men who had been identified in the service as drug users had not returned to their drug dependence upon return from Vietnam. This closely parallels estimates of success in Defense rehabilitation programs.

Dr. Wilbur, in referring to in-service treatment programs, reported more than 70,000 men had been treated for drug abuse with more than 59,000 either restored to duty or released from active service following successful rehabilitation, more than 6,000 men remained in short term rehabilitation and 4,000 more had been referred to the Veterans Administration for lengthier treatment at the end of their service tour.

* * *

The National Institutes of Health have announced a ban on research involving live aborted fetuses.

The restriction applies only to NIH-supported research but it is expected to be observed in much of the other medical research in this country.

Dr. Robert Berliner, NIH deputy director for science, said:

"We know of no circumstances at present or in the foreseeable future which would justify NIH support of research on live aborted human fetuses."

Dr. John F. Sherman, NIH acting director, said any scientist receiving NIH funds found to be doing experiments on live aborted human fetuses would be asked to stop even if NIH funds were not allotted to that particular research.

The ban did not apply to fetal tissue but only on live fetuses capable of being kept alive under laboratory conditions for several hours after abortion.

The NIH announcement was prompted by a protest march being planned by seniors at the Stone Ridge Country Day School of the Sacred Heart, a Roman Catholic school for girls adjacent to the NIH in Bethesda, Maryland.

* * *

Chairman Russell B. Long (D., La.) has reorganized the Senate Finance Committee into

six subcommittees, including one on health which will hold hearings and do the other spadework on legislation dealing with Medicare, Medicaid and national health insurance. The full committee will continue to make the final decisions.

Sen. Herman Talmadge (D., Ga.) is chairman of the health subcommittee. Other members are: Democrats — J. W. Fulbright (Ark.), Vance Hartke (Ind.), Walter F. Mondale (Minn.) and Abraham Ribicoff (Conn.); Republicans — Robert J. Dole (Kans.), Clifford P. Hansen (Wyo.), Bob Packwood (Ore.) and William V. Roth, Jr. (Del.).

Hansen and Hartke are two of the four chief sponsors of the American Medical Association national health insurance legislation, Medcredit. Packwood is a co-sponsor.

* * * * *

Program for Savings on Insurance Now in Operation

The dividend program for Workmen's Compensation Insurance offers physicians in Arkansas a good opportunity to reduce their expenses each year for this necessary item of overhead.

Your Medical Society came to this conclusion after checking into the program which has been approved by more than 290 trade associations throughout the country. It is a plan which returns premium each year (dividends) according to the loss experience of participating physicians.

A key provision of the program is a specialized accident prevention service. Recommendations from safety specialists help make your operation

ANSWER—Electrocardiogram of the Month

Rhythm regular at 77/min; PR = 0.14; QRS = 0.08; QT = 0.48. The Mean QRS axis is basically vertical and the QRS configuration is normal; the P waves are also of normal appearance. The T waves are extra-ordinary. They are broad, and associated with barely visible u-waves in V-3. The QT interval is excessively long. In all probability this finding would be a result of HYPOKALEMIA. This patient's electrolytes were: K = 2.6; Na = 120; BUN = 40. Other possibilities would be low Ca++, which also produces prolonged QT intervals, usually by lengthening the ST segment. Congenital QT prolongation frequently associated with congenital deafness might present this way, for these individuals are prone to Ventricular tachycardia through the R on T effect should that get a moderate sinus tachycardia.



Members of the Society and guests enjoyed the cocktail party preceding the inaugural banquet on Tuesday evening of the 1973 Annual Session.

a safer one and result in increased dividends on your insurance. The fewer the claims for those injured in your savings class, the better the dividends.

This proven service is underwritten by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group, 92nd Street and State Line, Kansas City, Missouri 64114.

Letter of Appreciation

June 2, 1973

TO: Members, Arkansas Medical Society

FROM: The Arkansas State Medical Assistants Society
The Sebastian County Medical Assistants Society

On behalf of the Arkansas State and Sebastian County Medical Assistants Society, I would like to extend our gratitude and appreciation for your help in making our 19th Annual State Convention a success.

Many thanks for your continuing support.

Sincerely,

/s/ (Mrs.) Elizabeth Doss

President, Sebastian County Medical Assistants Society

Secretary, Arkansas State Medical Assistants Society



THINGS



TO

COME

Seminar on Hand Injuries

A seminar pertaining to management of the injured hand, presented by the Hand Section of Plastic Surgery in conjunction with the Milliken Hand Rehabilitation Center, is scheduled for September 8, 1973, in the East Pavilion Auditorium at Barnes Hospital, St. Louis, Missouri. The program is limited to "Industrial Injuries of the Hand" and is designed primarily for physicians providing the initial and definitive care of the injured hand. Program topics are: "Management of Acute Amputations"; "Management of Crush Injuries"; "Late Management of Amputation Stumps"; "Replantation and Transplantation in Hand Reconstruction"; "Fractures and Dislocations of the Metacarpals and Phalanges";

"Fractures and Dislocations of the Carpal Bones"; "Emergency Care of the Injured Hand"; "Problem Cases"; "Management of the Stiff Hand"; and "Determining Disability Ratings of the Upper Extremity".

For more information write: Paul M. Weeks, M.D., Director, Milliken Hand Rehabilitation Center, 4960 Audubon Avenue, St. Louis, Missouri 63110.

Postgraduate Course in Otolaryngology Scheduled

A postgraduate course entitled "Otolaryngology for the Family Practitioner", presented by the University of Miami School of Medicine, Department of Otolaryngology, is scheduled for October 26-27, 1973, at the Playboy Plaza in Miami, Florida. Accredited by the AAFP. For information write: Bruce W. Weissman, M.D., Assistant Professor, Department of Otolaryngology, University of Miami School of Medicine, P. O. Box 875, Biscayne Annex, Miami, Florida 33152.



OBITUARY

Dr. John Rasco Martin

Dr. John R. (Jack) Martin of Gravette died May 6, 1973. He was born December 4, 1933, in DeWitt, Arkansas.

Dr. Martin was graduated from Arkansas Polytechnic College in Russellville and the University of Arkansas School of Medicine in Little Rock. He interned at St. Vincent Infirmary. Before entering medical school, Dr. Martin taught school for two years at Gillett, Arkansas, and served two years in the United States Army. He practiced in Siloam Springs from 1964 until December 1972, when he moved to Gravette.

Dr. Martin was a member of the Benton County Medical Society, the Arkansas Medical Society, the American Medical Association and the United Methodist Church. He is survived by his wife, Mrs. Jeanie Martin, one son, one daughter, one stepson, his mother, one brother, and one sister.



Members of the Council of the Society hosted a reception for all members on Sunday evening of the 1973 Annual Session. Members of the Executive Committee of the Council formed a receiving line.



PERSONAL AND NEWS ITEMS

Physicians Elected

Dr. Kenneth O. New of Russellville and Dr. John C. Wright of Newport have been elected to active membership in the American Academy of Family Physicians.

Physician's Office Burglarized

The office of Dr. Doyle Morrison of Cabot was burglarized on May 8th and a quantity of medical supplies, a tape recorder, and other items were taken.

Physicians Locate

Dr. M. L. Hyde is now associated with Drs. J. F. Kelsey, R. L. Sherman, W. P. Phillips, D. B. Smith, and H. G. Ellis in the practice of obstetrics and gynecology at 408 South 16th Street in Fort Smith.

Dr. Robert E. Price has joined Dr. Louis R. Munos in the general practice of medicine at the Cherokee Village Medical Clinic in Cherokee Village.

Dr. Robert L. Fincher has joined the Radiology Consultants group in Little Rock.

Dr. Robert C. Power is now associated with Dr. Donald G. Browning and Dr. Thomas J. Smith in the practice of gastroenterology at 409 North University, Little Rock.

Dr. Boyce West has announced the association of Dr. Jack Patterson, Dr. Donald Pennington and Dr. Maurice Stephens with him in the general practice of medicine at 600 Lucas Street in Clarksville.

Dr. Rebecca Flowers has joined Dr. C. C. Long in the general practice of medicine at 110 West Commercial in Ozark.

Dr. P. R. Anderson and Dr. John W. Balay have announced the association of Dr. R. Jerry Mann in their practice of medicine and surgery at 416 Main Street in Arkadelphia.

Dr. Thomas O. Beasley, a family physician, and Dr. Margaret Beasley, an anesthesiologist, have joined the staff of the Conway Clinic in Conway.

Dr. Easley Receives Award

At an awards dinner in Little Rock on June 2nd, Dr. Edgar J. Easley, Assistant Director of

the Arkansas State Board of Health was presented the Dr. Tom T. Ross Award for "outstanding achievement beyond the line of duty". The award is named for the late Dr. Thomas T. Ross, former state health officer and a pioneer in Arkansas public health administration.

Dr. Easley has been associated with public health in Arkansas since he joined the State Board of Health in 1939.



NEW MEMBERS

Dr. Doyle H. Morrison

Dr. Doyle H. Morrison, a native of El Paso, Arkansas, has been accepted for membership in the Lonoke County Medical Society. Dr. Morrison served in the United States Air Force from 1952 until 1956. He attended Arkansas State Teachers College and in 1959, he received a B.S. degree in engineering from the University of Arkansas. Dr. Morrison was graduated from the University of Arkansas School of Medicine in 1972. After completing his internship at the Medical Center Hospital in Columbus, Georgia, he opened a clinic for the general practice of medicine on Highway 89 West in Cabot.

Dr. Thomas O. Beasley

A new member of the Pulaski County Medical Society is Dr. Thomas O. Beasley, a native of Heber Springs, Arkansas. Dr. Beasley received a B.S. degree from the University of Arkansas at Fayetteville in 1964. In 1970, he was graduated from the University of Arkansas School of

NEW MEMBERS

Medicine. Dr. Beasley's internship was completed at St. Vincent Infirmary in Little Rock.

A family physician, Dr. Beasley is associated with the Conway Clinic in Conway.

Dr. R. A. Council, Jr.

Dr. R. A. (Tony) Council, Jr., has been accepted for membership in the Pulaski County Medical Society. Dr. Council was born in Fort



Dr. and Mrs. William S. Orr, Jr., and Mrs. Kenneth Duzan (left column), Mrs. C. A. Hoffman, and Dr. and Mrs. Robert Watson at the Council-hosted reception on Sunday evening of the 1973 Annual Session. Members of the Council and their wives were identified by special badges.



Dr. and Mrs. Elvin Shuffield (facing camera, left) Dr. Hoyt Choate, and Dr. Joe Verser (foreground, right) were among those attending the Council reception on Sunday, April 1.



Past President L. A. Whittaker and Councilor A. S. Koenig visit informally with the president of the AMA, Dr. Carl Hoffman, during the 1973 Annual Session (left column) and Past President Ross Fowler and Chairman of the Council C. C. Long enjoy one of the social functions at the convention.



NEW MEMBERS

Smith, Arkansas. He received his pre-medical education at Washington and Lee University, Lexington, Virginia, and was graduated from the University of Arkansas School of Medicine in 1971. He is presently a resident in Obstetrics and Gynecology at the University Medical Center in Little Rock.

Dr. Vadee Van Deusen Kroft

Dr. Vadee V. Kroft, a native of Ponca City, Oklahoma, is a new member of the Pulaski County Medical Society. Dr. Kroft attended Little Rock University before entering the University of Arkansas School of Medicine, from which she was graduated in 1968. Dr. Kroft completed her internship at Arkansas Baptist Medical Center in Little Rock.

Dr. Kroft's office for the general practice of medicine is at 7319 Baseline Road in Little Rock.

Dr. Kent C. Westbrook

Dr. Kent C. Westbrook has been accepted for membership in the Pulaski County Medical Society. Dr. Westbrook was born in Hot Springs, Arkansas. In 1961, he was graduated from the University of Arkansas in Fayetteville and in 1965 he was graduated from the University of Arkansas School of Medicine. He stayed on at the Medical Center for his internship and a residency in General Surgery.

Dr. Westbrook is associated with the University of Arkansas Medical Center and serves as Assistant Professor of Surgery. He is Board Certified by the American Board of Surgery.

Dr. Robert Milton Ashby

The Saline County Medical Society has announced that Dr. Robert M. Ashby, a native of Little Rock, is a new member of that Society. Dr. Ashby was graduated from the University of Arkansas and the University of Arkansas School of Medicine in 1962 and 1966, respectively. He interned at the University Medical Center and also did his residency work in Radiology there. Dr. Ashby holds a membership in the American College of Radiology.

For the past year, he has been associated with the Saline Memorial Hospital in Benton, where he specializes in Radiology.

Dr. Frank G. Thibault, Jr.

Dr. Frank G. Thibault, Jr., a native of Vancouver, British Columbia, Canada, is a new mem-

ber of the Saline County Medical Society. Dr. Thibault received his pre-medical education at the University of Arkansas at Fayetteville, graduating in 1962. His medical education was received at the University of Arkansas School of Medicine, from which he was graduated in 1966. His internship was completed at the University Medical Center and his residency work in Obstetrics and Gynecology was done at the City of Memphis Hospitals, Memphis, Tennessee.

Dr. Thibault's office, where he specializes in Obstetrics and Gynecology, is at 212 West Sevier in Benton. He holds a membership in the American College of Obstetricians and Gynecologists.

Dr. Joe Paul Alberty

Dr. Joe Paul Alberty has been accepted for membership in the Washington County Medical Society. Dr. Alberty was born in Wewoka, Oklahoma. He received a B.A. degree from the University of Arkansas in Fayetteville in 1961 and in 1965 he received an M.D. degree from the University of Arkansas School of Medicine. After completing his internship and his residency work in General Surgery at the University Medical Center, Dr. Alberty served two years with the United States Air Force Academy Hospital in Colorado. Following his release from service, he completed a residency in Orthopaedic Surgery at the University Medical Center in 1971.

Since July 1st, Dr. Alberty has been associated with Dr. William B. Stanton and Dr. John W. Wideman in the practice of Orthopaedic Surgery at 300 North Greenwood in Fort Smith. He formerly practiced in Fayetteville.

Dr. Jerry S. Dorman

Dr. Jerry S. Dorman is a new member of the Washington County Medical Society. He is a native of Memphis, Tennessee. Dr. Dorman was graduated from the University of Oklahoma at Norman in 1962, receiving a B.S. degree. In 1964, he was graduated from the University of Tennessee College of Medicine in Memphis. His internship was completed at the City of Memphis Hospitals, Memphis, Tennessee, and Johns Hopkins Hospital, Baltimore, Maryland. His residency work in General Surgery was completed at Johns Hopkins Hospital and Baltimore City Hospital. From 1965 until September 1972, Dr. Dorman served in the United States Air Force.

Dr. Dorman is associated with Dr. John W.

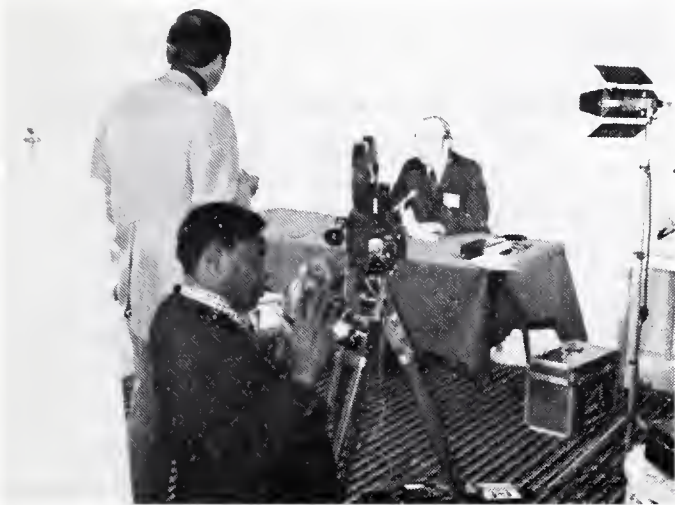
NEW MEMBERS

Dorman and Dr. John E. Dorman in the practice of medicine at 1203 Sunset in Springdale.

Dr. James C. Romine

Dr. James C. Romine, a native of Little Rock,

is a new member of the Washington County Medical Society. Dr. Romine attended Duke University, Durham, North Carolina, and was graduated from the University of Arkansas School of Medicine in 1965. He interned at



Dr. John Tudor at press conference during the convention (left). Mrs. Lynn Harris and Dr. A. C. Bradford, members of the Ark-Pac Board, soliciting Ark-Pac memberships during the convention (right).



Dr. Jim Lytle (left) and Dr. T. D. Brown take advantage of tests offered by an exhibitor at the convention.



Mrs. Dennis Schreffler, national president-elect of the Woman's Auxiliary to the Student American Medical Association; Mr. Schreffler; Fred Heinemann representing SAMA, and Jim Miller representing the Senior Class at the University of Arkansas School of Medicine, attend the Sunday session of the House of Delegates (left column). Dr. and Mrs. C. C. Long at the shrimp and beer party hosted by Blue Cross-Blue Shield on Monday night of the convention (right column).

Grady Memorial Hospital, Atlanta, Georgia, and completed his residency work in Obstetrics and Gynecology at the University of Arkansas Medical Center. He served two years in the United States Air Force.

Dr. Romine is associated with Dr. Harmon Lushbaugh and Dr. George R. Cole at 740 Lollar Lane in Fayetteville. He is a Junior Fellow of the American College of Obstetricians and Gynecologists.

RESOLUTIONS



Dr. John R. Martin

The Benton County Medical Society convened and we were very much grieved to hear of the death of Dr. John R. Martin.

It is resolved by the Benton County Medical Society that Dr. Martin was a highly respected physician, and dedicated to his duty to the people of Northwest Arkansas.

It is our intent and our deep meaning to sympathize with the family and those close to Dr. Martin for this great loss to our community.

Adopted May 1973

Benton County Medical Society

* * *

Dr. James B. Rice

WHEREAS, God in His wisdom, has called from us our associate, friend and co-worker, Dr. James B. Rice, whose dedication and faithfulness to our profession and his devotion to our medical community is well known to us and,

WHEREAS, Dr. Rice's high ideals and purposes have effectively influenced our profession and the patients whom he served and,

WHEREAS, Dr. Rice, during his years of association with us has always reflected the highest caliber of ethical service and conduct and,

WHEREAS, the Jefferson County Medical Society mourns its loss,

THEREFORE BE IT RESOLVED, that the Jefferson County Medical Society expresses to Mrs. Rice and the other family members its sincere sympathy at the loss which they have sustained, and,

BE IT FURTHER RESOLVED, that copies of this resolution be furnished to the family and to the Journal of the Arkansas Medical Society.

Jefferson County Medical Society

April 10, 1973

Hypophosphatemic Osteomalacia Associated With "Nonendocrine" Tumors

R. M. Salassa, J. Jowsey, and C. D. Arnaud
(Mayo Clinic, Rochester, Minn)

New Eng J. Med 283:65-70 (July 9) 1970

Two men with severe adult-onset hypophosphatemic osteomalacia made spectacular recoveries after removal of small benign sclerosing hemangiomas. In both cases removal of the tumor was followed by an increase in the serum inorganic phosphate to high normal levels, relief of clinical symptoms, and roentgenographic evidence of healing of the osteomalacia. In the second case, removal of the tumor resulted in an increase in serum immunoreactive parathyroid hormone. Some cases of adult-onset hypophosphatemic osteomalacia may be directly related to the presence of nonendocrine tumors which elaborate a humoral substance other than parathyroid hormone that markedly increases the renal clearance of phosphate, resulting in hypophosphatemia and failure of skeletal mineralization.

Prognosis of Stage I Lymphosarcoma and Reticulum Cell Sarcoma

A. Lipton and B. J. Lee (PO Box 1809, San Diego, Calif 92112)

New Eng J Med 284:230-232 (Feb 4) 1971

Eleven patients with stage I (ie, negative lymphangiogram) lymphosarcoma and 15 with reticulum cell sarcoma have been followed for at least two years. There were three deaths and six recurrences, all within 32 months of diagnosis. Twenty-four of 26 patients (92%) were alive at two years, and 17 of 20 (85%) at four years. Early bone marrow invasion was seen only in the three patients who died. Six patients have survived a mean of 111+ months with nodal and extranodal recurrences. There were two deaths and six recurrences in 19 patients (42%) receiving less than 3,500 roentgens (supervoltage in most cases) and only one death and no recurrences in seven patients (14%) receiving at least 3,500 R to the primary tumor site.

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Liver Scanning in Community Hospitals

Analysis of 100 Cases

A. E. Andrews, M.D.*

Regular x-ray studies are not very helpful in evaluating the liver. Special x-ray procedures such as arteriography are not generally practical for smaller hospitals, and except for a limited number of patients, usually not indicated. Laboratory studies done on the patient's blood have always been the best way to evaluate the liver, and I think remain so, but liver scanning can be very helpful in the evaluation of many patients also. It is not necessary to transfer these patients to the larger medical centers for this study. The Saint Michael Hospital of Texarkana has 110 general medicine and surgery beds. Liver Scans have been done here for years. The liver scans at this hospital are performed using a Picker Magnascanner with a three inch crystal.

Several radioactive isotopes are available for liver scanning. The most popular ones are Gold-198, Technetium-99m as the Sulfur Colloid and I-131 Rose Bengal. Indium-113m is being used in a few places. Gold-198 is used at this hospital because the 2.7 days half-life of the Isotope and the cost allow us to keep it on hand. The Technetium-99m Sulfur Colloid can be purchased in single dose amounts and is superior to Gold-198 in many ways, but due to its short half-life, transportation schedules become a problem, particularly over week-ends and when bad weather interrupts airplane flights. Technetium-99m Sulfur Colloid may also be prepared from a molybdenum-99 "COW". With Gold-198 available in the hospital at all times, scans can be done when they are ordered without any significant delay.

The technique used at this hospital is as follows: No preparation of the patient (i.e., diet, laxatives, etc.) is necessary. The patient is brought to the Nuclear Medicine Department (a

room in x-ray) and given 100 to 150 microcuries of Gold-198 intravenously. After an interval of 20 to 30 minutes, the scan is made with the patient in the supine position. Using Teledectos paper as a guide, we try to cover the entire width of the body to include the spleen area with an area covered both above and below the liver. This scan is inspected immediately, and if necessary, an additional scan is done with the patient in the lateral position with the right side up. Each of these scans require approximately 20 to 30 minutes to complete.

I have evaluated 100 consecutive patients that had liver scans made in this hospital over a fifteen month period in 1970 and 1971. Figure 1

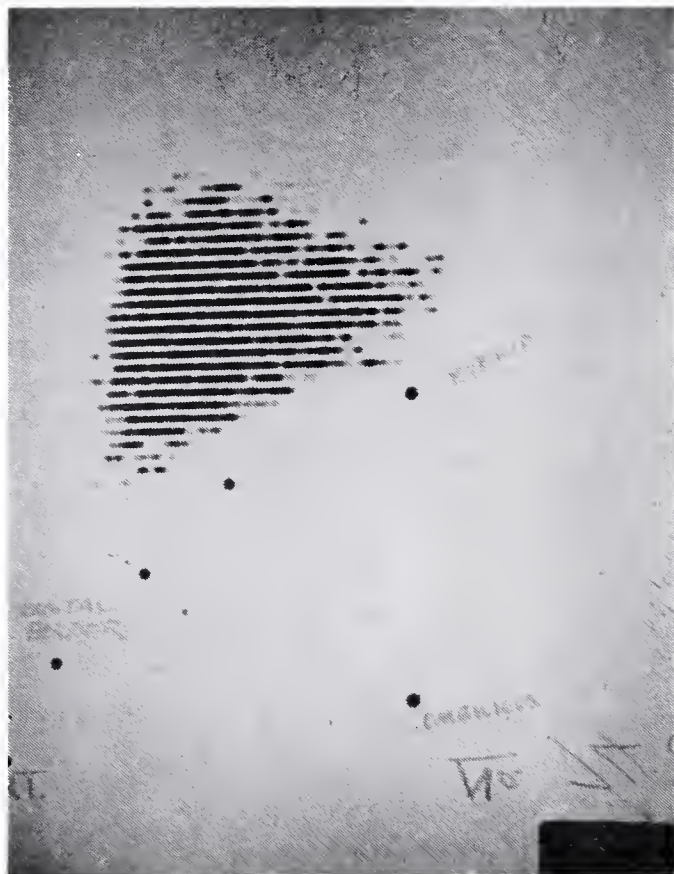


Figure 1.
Normal Supine Scan with Anatomical points marked.

*Chief of Radiology, St. Michael Hospital, Texarkana, Arkansas.

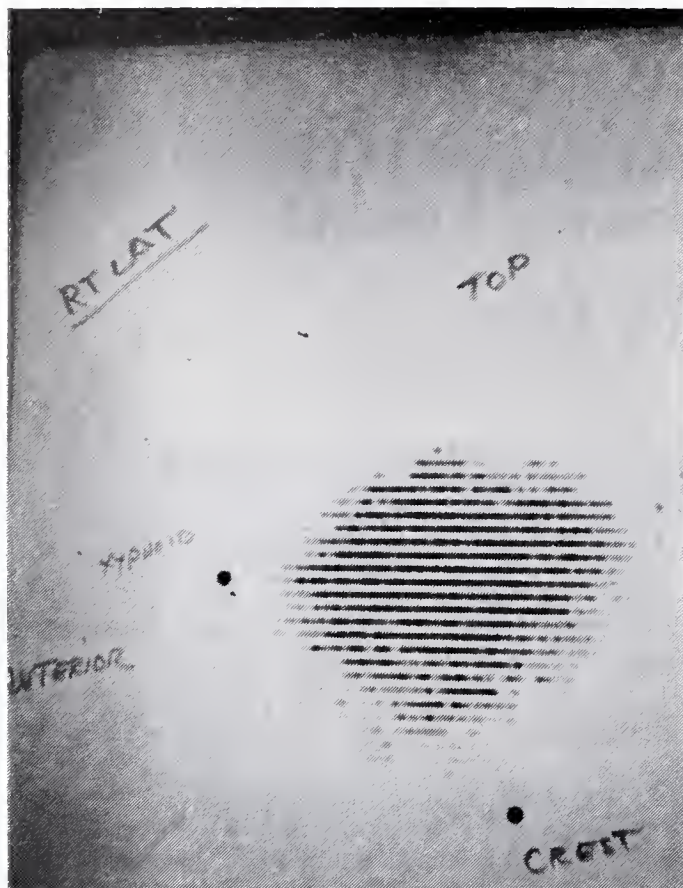


Figure 2.
Normal Lateral Liver Scan—Right side of patient is up.

and figure 2 demonstrate normal liver scans. The results of this evaluation are as follows:

HISTORY (See Table I)

TABLE I: INDICATIONS FOR LIVER SCANS

CA In Past History	32 cases
CA Suspected	18 cases
Unexplained Pain	18 cases
Part of General Work-up	9 cases
Possible Cirrhosis	6 cases
FUO	5 cases
Sub-Diaphragmatic Abscess	4 cases
Miscellaneous	8 cases
TOTAL	100 cases

GENERAL:

These 100 patients were all adults. None of the liver scans done in children were included because only a very few pediatric patients in this area with medical complaints are admitted to this hospital. These patients' ages were from 21 years to 84 years with a mean age of 61 years. Forty-five patients were male and fifty-five were female. This corresponds to the sex distribution of the general hospital population at this hospital.

CARCINOMA IN PAST HISTORY—

32 patients. (32%)

A past history of carcinoma was by far the

most common reason given for requesting a liver scan. Fifteen of these cancers were primarily in the colon. The breast was the primary site for another eight patients. Three patients had previous cancer in two separate sites.

SIGNS AND SYMPTOMS SUGGESTING CARCINOMA:

Eighteen (18) patients had liver scans because of findings suggesting carcinoma such as: unexplained weight loss, anemia, a pleural effusion, ascites, a positive stool guaiac, and cancerophobia.

UNEXPLAINED PAIN, USUALLY ABDOMINAL, was the principal reason for the scan in eighteen (18) patients.

OTHER HISTORY:

In nine (9) patients, the liver scan was part of a *general work-up* in which a liver disease may or may not have been suspected. The possibility of *cirrhosis* and/or *excessive alcohol consumption* was given as the reason for the scan in six (6) patients. *Fever of undetermined origin* was given for five (5) patients. Evaluation of a subdiaphragmatic abscess was the reason for the liver scan (often in conjunction with a lung scan or chest x-ray) in four (4) patients. The remaining patients had scans for various miscellaneous reasons.

RESULTS: (See Table II)

TABLE II: SCAN FINDINGS

Normal	39 cases
Probably Normal	1 case
Normal Liver With Enlarged Spleen	4 cases
Palpable Mass Not Part of Normal Liver	3 cases
Palpable Mass Attached to Otherwise Normal Liver	2 cases
Probable Metastatic Disease	12 cases
Probable Cirrhosis	2 cases
Possible Cirrhosis or Metastatic	4 cases
Abnormal—Slightly Enlarged Liver	6 cases
Abnormal—Enlarged Liver with Spleen	6 cases
Activity	6 cases
Abnormal—Non-Specific Liver Enlargement	14 cases
Large Space Occupying Lesion	2 cases
Diaphragmatic Abscess—Confirmed	2 cases
Diaphragmatic Abscess—Not Confirmed	2 cases
Radiation Reaction	1 case
TOTAL	100 cases

GENERAL:

These scans were all interpreted by the author. My reports generally state what Isotope was used,

how much and how it was administered (i.e., intravenously). The size of the liver is stated (normal, slightly enlarged, or enlarged). Sometimes the degree of enlargement is stated in terms of centimeters below the costal margin in the mid clavicular line. A statement is made whether the uptake in the liver is homogeneous or heterogeneous. Whether or not there is activity over the spleen is also reported. Anything that suggests a space occupying mass is of course reported.

An impression is given and for this, good clinical information is absolutely necessary as well as a history and brief examination of the patient by the reporting doctor. For example, a scan showing heterogenous activity over an enlarged liver with activity over the spleen, would be very suspicious of cirrhosis, but metastatic disease could give an identical appearing scan. This differentiation must be made using clinical symptoms and other findings. Because this type of situation is very common in interpreting scans, there must be a high degree of cooperation between the referring physician and the doctor interpreting the scan.

FOLLOW-UP:

Reliable follow-up is available in only forty-seven of these patients. This is based on surgery, needle-biopsy or by autopsy, all within a reasonable time after the first scan. In these forty-seven cases, twenty cases were reported as *NORMAL*. In these twenty cases, the follow-up pathology was normal in fifteen cases (75%) and the follow-up demonstrated an abnormal situation in five

cases, (25% False Negatives). Twenty-seven cases that were reported as *ABNORMAL* had adequate follow-up studies. Twenty-four (89%) of these cases were proven abnormal and three (11%) cases had a normal liver. (11% False Positive).

COMMENT:

Liver scanning is a practical, helpful procedure that can be performed in smaller community hospitals. It can be performed with equipment that is not too expensive and radioactive isotopes are available for this.

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Raised Antibody Titers to Epstein-Barr Virus in Systemic Lupus Erythematosus

A. S. Evans, N. F. Rothfield, and J. C. Niederman
(60 College St, New Haven, Conn)
Lancet 1:167-168 (Jan 23) 1971

Antibody titers to Epstein-Barr virus (EBV) were raised to 1/160 or above by an indirect immuno-fluorescence test in 62 of the sera from 100 cases of systemic lupus erythematosus (SLE). The increases were unrelated to heterophile or antinuclear antibodies or to the therapy employed. A subsample of this group compared to matched controls showed significantly higher EBV titers in SLE sera but no consistent trend in ten other antibodies tested.

Autoantibodies and Hepatitis-Associated Antigen in Acute Infective Hepatitis

L. J. Farrow et al (London School of Hygiene and Tropical Medicine, London)
Brit Med J 2:693-694 (June 20) 1970

Smooth muscle antibody (SMA), IgG, IgM, or both types, was found at some time in serial serum samples from 34 of 39 patients (87%) with acute viral hepatitis. The hepatitis-associated antigen (HAA) was found by the immunodiffusion technique in 33% of the patients. SMA and HAA occurred independently, and unlike HAA which was strongly associated with a parenteral mode of exposure to infection, the incidence of SMA is more directly related to liver cell damage than to the presence of HAA in the serum.

The Care of "Ostomies" and Related Problems

Ralph A. Downs, M.D.* and Wilma J. Hoyle, E.T.**

The context of this paper is concerned, primarily, with the common conditions affecting the stoma and its surrounding skin. The recognition, prevention, and treatment of these disorders are emphasized. Without the knowledge of the basic principles involved in stomal care, intolerable situations can develop both for the patient and his attending physician. Throughout the years, there has been an obvious need for specialized help; as a result, the enterostomal therapist evolved. These specialists have done much to improve the water-tight appliances and have rendered immeasurable help in the pre-operative preparation and post-operative rehabilitation of the "ostomy" patient.

THE ILEOSTOMY AND THE ILEO-CONDUIT STOMA

The ileostomy stoma should emerge through the center of a smooth plateau in the lower abdomen which is removed from anatomical structures such as bony prominences, the umbilicus, and the median raphe. It should be in an area of skin that does not enfold when the patient bends or sits. The stoma site should be carefully selected, pre-operatively, since a malpositioned stoma leads to insurmountable leakage problems. The appliance should have a face plate, small enough not to extend beyond the boundaries of the plateau. The opening in the plate should fit snugly; there should be a margin of only 1/8-inch between the stoma and the inner circumference of the ring. Care of the peristomal skin and the use of properly fitting appliances are the basic principles which must be fastidiously adhered to.

Yeast infection is the most common complication in the immediate post-operative course (Fig. 1a). It occurs in the majority of cases, and usually, spontaneously regresses as the skin toughens. This skin lesion is thought to be due to an overgrowth of yeast which results from the reduction of skin bacteria by the cleansing process necessary in stomal care. The corrosive nature of the ex-

creta contributes to this condition and predisposes to superimposed infection. This skin problem is minimized by the prompt changing of appliances when leakage occurs and the proper care of the underlying skin. Mycostatin* powder, at this stage, is routinely sprinkled on the skin before the adhesive vehicle is applied. It should be used as long as the yeast infection is present. It should be used prophylactically if such infection becomes recurrent. When excoriation takes place, (Fig. 1b) Kenalog* spray should be applied sparingly to the skin before the application of Mycostatin, and both covered with the adhesive preparation. The healing process proceeds rapidly beneath the appliance if the skin is kept dry. Ointments and medications with oily vehicles should not be used since they preclude the successful adherence of the appliance. Tincture of Benzoin will cause blistering of the skin if used beneath an adhesive vehicle.

Stoma plates which do not fit lead to chronic leakage which will, in time, produce excoriation and ulceration of the skin, not to mention the unbearable social problems which it creates for the patient. If the plate is too large, it may produce defects, peripherally, in the skin when the patient sits or bends. The improved adhesive properties of the new appliances have made it possible to use smaller plates which have diminished this particular problem considerably.

Ill-fitting stomal rings lead to trouble. If the ring is too large, an excessive amount of skin is exposed to the excreta; this leads, eventually, to epithelial hyperplasia (Fig. 1c). This thickening process, eventually, predisposes to scarring and contractures (Fig. 1d). If the ring is too tight, pressure defects of the stoma will occur (Fig. 1e).

COLOSTOMIES

The ascending and transverse colostomies have a liquid excreta as does the ileostomy and, consequently, require a water-tight seal. Oily preparations such as zinc oxide, aluminum paste, or Vaseline should not be used since they preclude the adherence of water-tight appliances. In addi-

*119 North Van Buren, Little Rock, Arkansas 72205.

**Enterostomal therapist, Route 2, Box 307, Mulberry, Arkansas 72947.

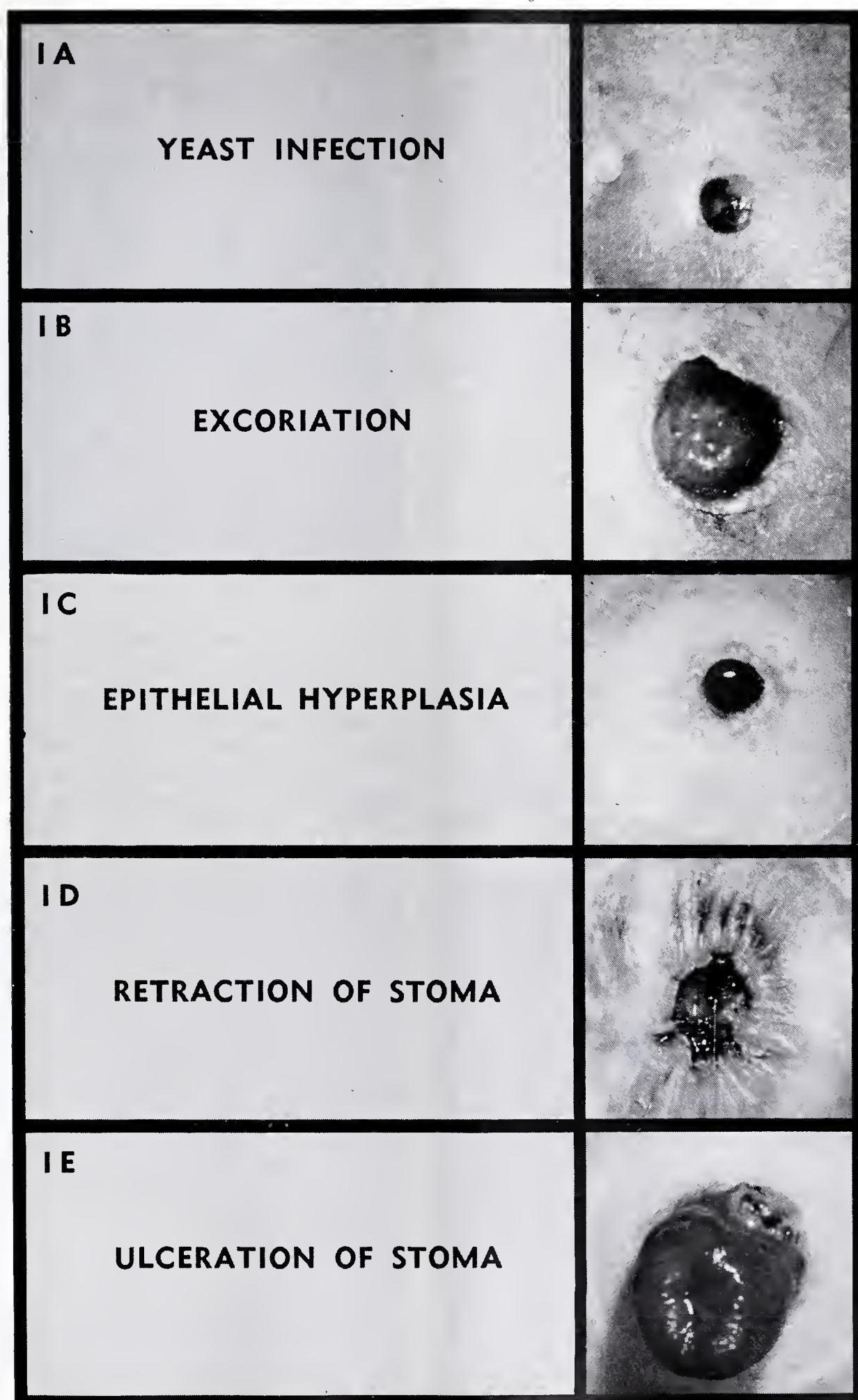


FIG. 1
SKIN AND STOMAL COMPLICATIONS

tion, the excreta from this portion of the gut is capable of digesting oily vehicles, thus, lessening the efficiency of these medications. Adhesive washers such as Karaya or Stomahesive* are impermeable to these digestive juices and, consequently, work well in this situation. Not only do they afford good protection to the skin; but, they form an adhesive pad to which the water-tight appliance can be attached. The same techniques in protecting the skin around ileostomies can be applied here. Minor irritations can be healed with the use of decantid Gelusil. The peri-osteal skin is painted with a coat of Gelusil over which is sprinkled Karaya powder to form a cement to which the appliance will adhere. In more serious excoriated conditions, Mycostatin and/or Kenalog spray may be utilized.

FISTULA

The odor and skin complications notoriously associated with abdominal fistulae can be controlled with the use of water-collecting devices. The skin is cared for in the same manner as that surrounding an ileostomy. Since the opening is flush with the skin surface, a flat appliance should be used so that the excretions can be collected at skin level. The Stomahesive wafer is well applied in this situation since it clings closer to the skin and the center hole can be cut to fit the fistulous opening.

Large, excoriated, areas of skin around an incision, such as might be seen following an evisceration can be protected and rapidly healed by shingling the affected skin area with unperforated Stomahesive wafers and by applying the proper medication beneath.

SKIN PROBLEMS AROUND DRAINAGE TUBES

Skin conditions which result from leakage around nephrostomy, gastrostomy, cystostomy, and caecostomy tubes may be helped with the use of water-tight appliances. The surrounding skin is covered with an adhesive washer through the center of which the tube passes. The water-tight pouch containing the tube is, then, attached to this adhesive pad. The affected skin may be treated with Mycostatin or Kenalog spray. This is a temporary measure to enable the skin to heal, after the necessary alterations of the drainage tube have been made to stop the leakage.

*Squibb & Sons

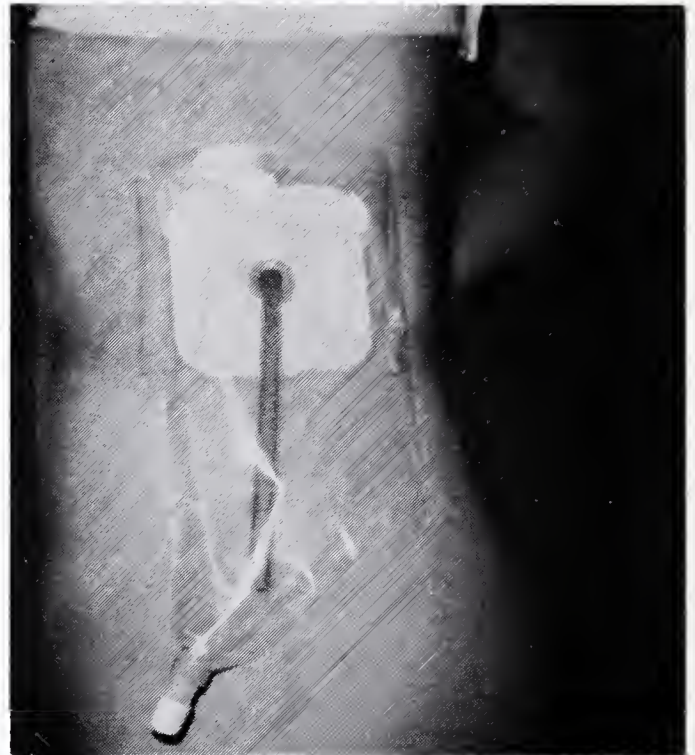


FIGURE II
Water-tight Appliance Around Nephrostomy Tube

USE OF BELTS

Due to the adhesive properties of the modern appliances, belts are not usually necessary and should be avoided whenever possible. As the belt shifts to seek the smallest circumference around the waist, it has a tendency to displace the appliance and cause leakage. To compensate for this, it is a natural tendency for the patient to progressively tighten the belt. This cinching effect produces an unsightly, transverse crevice around the waist which is worse in growing children. Also, the face plate will produce a permanent circular indentation around the stoma. These defects in the skin surface will cause subsequent leakage.

SUMMARY

1. Techniques regarding stomal care of the ilial conduit, the ileostomy and colostomy are discussed.
2. The common complications of the stoma and its surrounding skin are illustrated. The treatment and prevention of these conditions are outlined.
3. The use of the water-tight appliances to control abdominal fistulae or chronic skin irritations around drainage tubes is described.



Regeneration of the Liver After Radiation Therapy Demonstrated by Liver Scanning

A. E. Andrews, M.D.* and J. B. Goff, M.D.**

A 51-year-old WF was first admitted to the hospital on 3-26-70, with right flank pain and hematuria. She gave a past history of a previous hysterectomy and hemorrhoidectomy and removal of a benign tumor from her back. While in the hospital, a right renal mass was discovered and the patient had an operation in which a renal cell carcinoma of the clear cell type was removed. The tumor was well encapsulated, and the surgeon felt that it had been completely removed.

The patient was referred for radiation therapy and on 5-15-70, she completed a tumor dose of 2,800 rads delivered to the midline of this area. This was given with ortho-voltage equipment through anterior and posterior ports measuring 15 cm. by 15 cm. On 6-18-70, the patient was readmitted to the hospital with a history of fever and weight loss. A chest x-ray and upper GI series, Barium Enema and bone survey were all normal.

The first liver scan was done on 6-19-70 (figure 1). This scan shows an enlarged liver with the

left lobe particularly enlarged. There is decreased activity over the lower portion of the right lobe of the liver and this was noted to correspond to the skin changes from the previous radiation therapy.

Based on the liver scan, a tentative diagnosis of radiation necrosis of part of the right lobe of the liver was made. The patient was discharged without further treatment.

On 8-7-70, the patient was again admitted to the hospital with fever and weight loss and an elevated white blood cell count. On this examination, another liver scan was done (figure 2). This shows still an enlarged liver, with a large left lobe, and some decreased activity again over the lower portion of the right lobe, but there is some increased activity when compared to the first scan.

While in the hospital, a retroperitoneal abscess was drained. No bacteria was grown from the material. This drainage of the abscess relieved the patient's fever, and she was discharged from the hospital improved.

She had no further complaints of this nature,

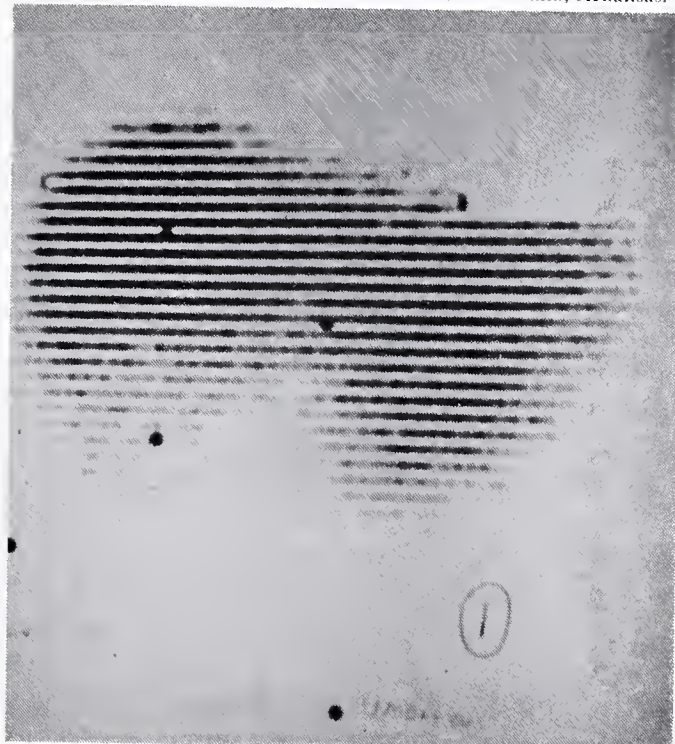


Figure 1.

Supine Liver Scan (6-19-70). Decreased activity over the lower right lobe. Enlarged left lobe.



Figure 2.

Supine Liver Scan (8-7-70). Some regeneration has occurred. The left lobe is still enlarged.

but returned to the hospital seventeen months later on 1-18-72, for an additional liver scan (figure 3). This again revealed slight enlarge-

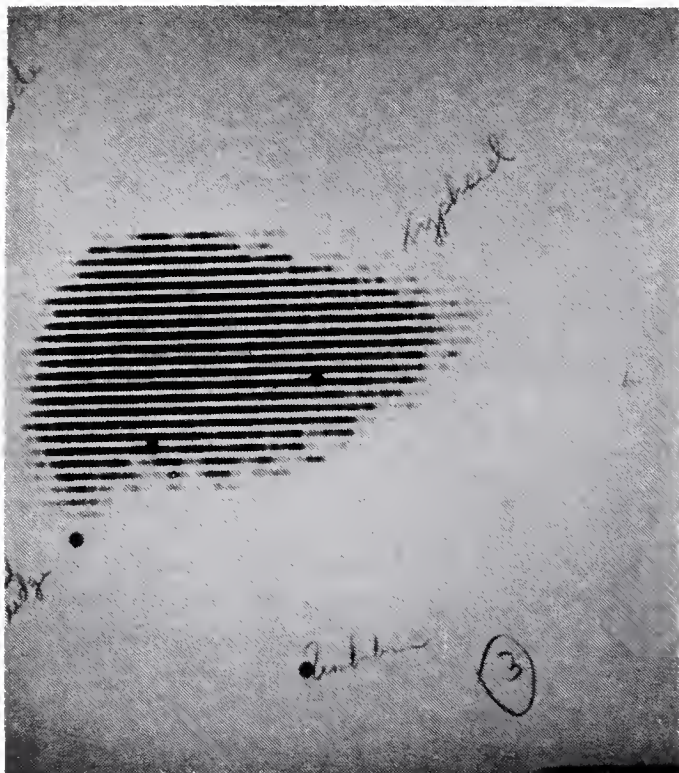


Figure 3.
Liver Scan (1-18-72). Scan has returned to normal.

ment of the left lobe in an otherwise normal liver. Normal activity was present over the lower portion of the right lobe.

COMMENT:

Regeneration of the liver after surgery and other results has been well documented. The changes in this patient's liver were not thought to have caused any of her clinical signs or symptoms, but are very interesting in that the area of decreased activity on the first scan so nearly corresponded to the skin changes making an obvious suggestion of the etiology. The follow-up scans demonstrate complete regeneration of this area.

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Relationship of Long-Acting Thyroid Stimulator to Pretibial Myxedema

D. R. Schermer et al (H. H. Roenigk, Jr., Cleveland Clinic Foundation, Cleveland)
Arch Derm 102:62-67 (July) 1970

Long-acting thyroid stimulator (LATS) is a 7S (IgG) δ -globulin of unknown origin found in a large number of patients with pretibial myxedema. In this study, statistically positive responses for serum LATS activity were demonstrated in 18 (94%) of 19 patients. There was a poor correlation between the severity of the skin lesions and the level of serum LATS. In all patients tested, serum immunoglobulins IgG, IgA, and IgM were within normal limits. With immunofluorescent techniques, attempts were made to demonstrate IgG, IgA, IgM, fibrinogen, and complement C'3 in affected tissues, but results were uniformly negative. No LATS response could be demonstrated from tissue extracts from areas of pretibial myxedema. These latter two findings do not support the concept of the production of pretibial myxedema as a result of a local antigen antibody reaction tissue.

Pathology of Nephrotic Syndrome in Children

J. Churg (Mount Sinai School of Medicine, New York), R. Habib, and R. H. R. White
Lancet 1:1299-1303 (June 20) 1970

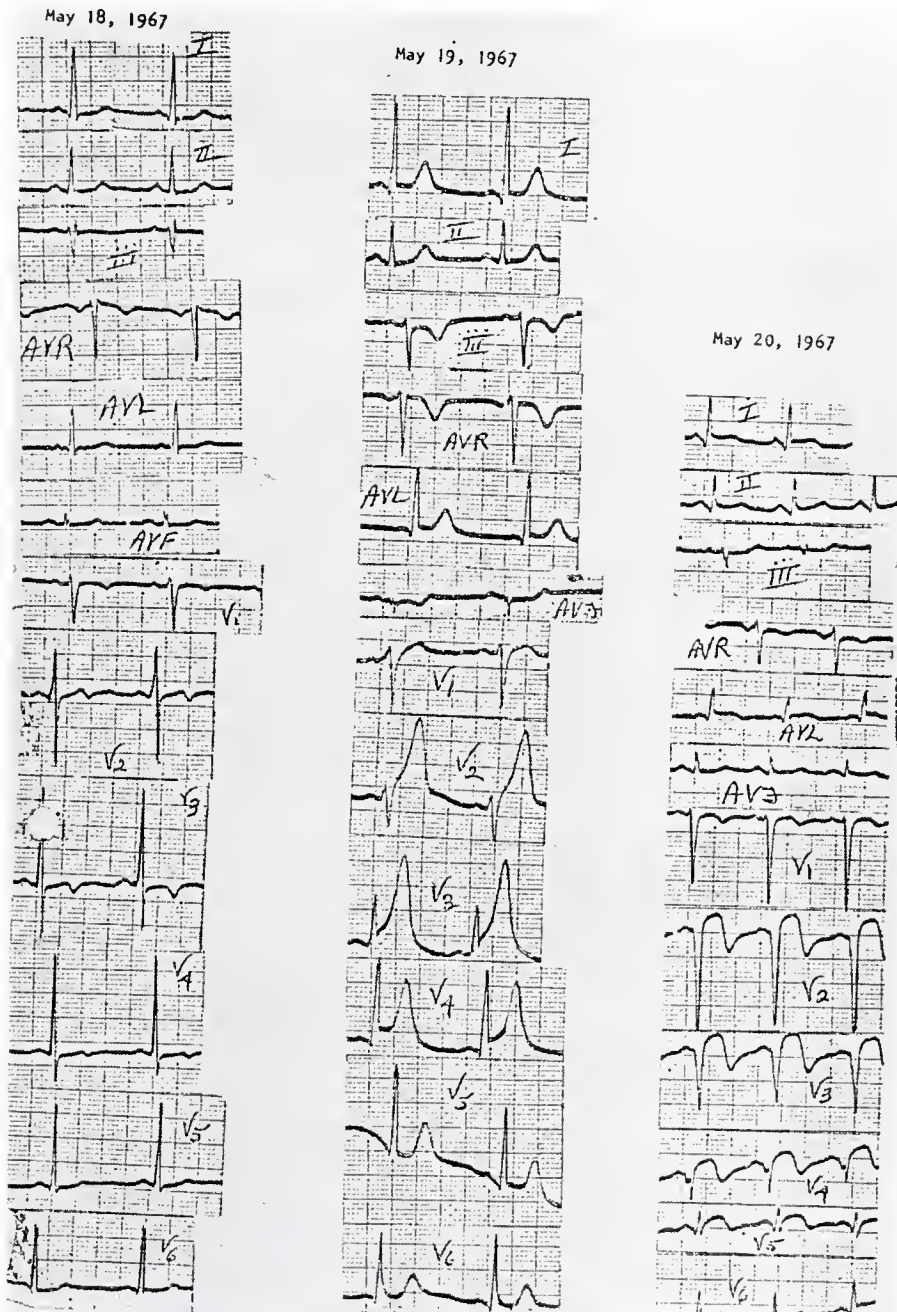
The renal biopsy findings in 127 previously untreated children with the nephrotic syndrome of recent origin are reported. Minimal changes were observed in 98 (77%) patients, and most responded to corticosteroid therapy. In addition to the well-known forms of chronic glomerulonephritis, two distinct but less well recognized conditions are described. In one, focal sclerosing lesions involve the glomeruli to an increasing extent and may ultimately lead to renal failure; in its early stage the condition may be difficult or even impossible to distinguish from minimal changes. Most cases are steroid-resistant. In the other condition there is mild mesangial thickening and proliferation similar to that observed in resolving post-streptococcal nephritis. Although some cases may be steroid-resistant and the clinical course protracted, the prognosis is generally favorable.

ELECTROCARDIOGRAM



OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center
(See Answer on Page 113)



50-year-old white male on no medications. Between 1st and 2nd tracing, patient underwent laminectomy for a slipped disc. Spinal anesthesia was employed, and patient had hypotensive episode.

John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



PUBLIC HEALTH AT A GLANCE

Health Education

Carol Hopkins*

Health Education has a new image—promotion of the quality of life; a development of concern for the total being of human existence, whether it be potential capacities or an environment where people can flourish; to involve consumers in activities with a purpose—for broader understanding of what is “optimum” health.

Health education often relies on choice by knowledge, individual responsibility and development of skills by a given staff of health educators.

Who are health educators? We all are! In one way or another each of us disseminates information concerning health.

Some of us who are professional educators can be found in the Division of Public Health Education, Arkansas State Department of Health.

Today, the Division of Public Health Education has a full-time staff of eight persons, including the director.

Health education provides much more than health information since education, itself, is the result of change of habits, values and attitudes. The total person (physical, social and mental) and his activities are considered and stressed throughout all health programs.

These programs are presented on request from schools, churches, civic organizations and other agencies. Program content or the topic of discussion is usually specified by the group requesting the program. Make-up and activities conducted during programs are often left to the discretion of program staff. Length of programs vary according to the request. They may be short as one hour or as long as three days. Topics most often presented include drug abuse, population, health careers and venereal disease.

The public relation section of the division is responsible for coordination of activities with the mass media and other State agencies in develop-

ment of complete health programs and presenting them to the public.

Health Department orientation programs are provided new staff, health education students and any group requesting such. Persons in this program are given the opportunity to talk with the staff of other Divisions, ask questions and observe how the Health Department functions. During orientation programs other health facilities also are visited for observance of the “co-ordinated effort”.

The division also maintains the Film Library for the Health Department. A library of approximately 1,200 films is available for use by State and county health department staff and others requesting the films. A total of 91,781 persons viewed the film prints last year. Films most often requested included drug abuse, venereal disease and family planning.

Medical-Self-Help films were shown to 29,547 students in 439 classes. The average number of students in each class was 67.

The division also is responsible for servicing, packaging and mailing of all films leaving and returning to the Department and acquisition of “new” films for preview and possible purchase.

In the past few months the division has enlarged its scope of program services and audio-visual material to include poisoning, safety (motorcycle and fire) and aspects of personal hygiene.

In connection with programs and audio-visual material, educational “hand-out” material is developed by the staff of health educators. Recent developments include pamphlets on Sickle Cell Anemia, Tips for Two Wheelers (safety), two on immunizations, Home Health Services and Guide: To Be A Woman (personal hygiene).

A pamphlet library of 200 health titles is maintained for distribution to the 82 city and county health departments, organizations and to fill individual requests.

*Division of Public Health Education, Arkansas State Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

Other creative services include poster design, exhibit development, cartoons and development and publication of monthly (SCOPE) and quarterly (EMS-RESPONSE) health bulletins.

All of these activities, combined, are the composition of a public health education program. The need for health education in Arkansas presents a tremendous challenge to all of us.

As more funds and manpower become available to aid people and communities in dealing with health problems, help people know what health facilities are available and help them assume some responsibility for self care and to provide other aspects of health education, then we, as educators, will have taken some more steps toward alleviating the "health crisis".

* * * * *

ARKANSAS STATE DEPARTMENT OF HEALTH

Division of Public Health Education

June 13, 1973

Edgar J. Easley, M.D., Director, Bureau of Local Health Services, Arkansas State Department of Health, received the Dr. Tom T. Ross Award, the highest award given by the Arkansas Public Health Association.

The award for "outstanding achievement beyond the line of duty" was presented by Miss Sarah Lou Butler, Director of Public Health Nursing, State Health Department.

Dr. Easley began his career in public health in 1939, he was Medical Director of the Extra

Cantonment Area Venereal Disease Control, 1941 and later director of the Division of Venereal Disease Control and has been Assistant State Health Officer since 1951.

Dr. Easley also is past-president (1951) of the Pulaski County Medical Society, Secretary to the Society for eight years, served on several committees for the State Medical Society and on the Council of the State Medical Society and chairman of the public health committee of the State Society.



ANSWER—Electrocardiogram of the Month

1st tracing—

Sinus Rhythm at 70/min

PR = 0.14

QRS = 0.08

QT = 0.38

Normal P & QRS waves; T waves have relatively low amplitude, but the QRS-T angle is less than 90° and thus within normal limits. The ST segment shows rather marked flattening, most notable in I, AVF & V₆ which may be a harbinger of possible coronary insufficiency.

2nd tracing—

Sinus rhythm at 66/min

The PR, QRS, QT intervals are relatively unchanged. The QRS complexes, however, show slightly more prominent Q's in I & AVL. Most significant, however, are the St & T wave changes. The J point is elevated and "hyper-acute" T waves (large peaked T waves usually associated with elevated ST segments) are present suggesting an acute myocardial injury.

3rd tracing—

Sinus rhythm at 94/min

PR = 0.12

QRS = 0.08

QT = 0.40

Q waves in I & AVL are now quite prominent. They are, nonetheless, less than 0.04 sec. in duration and only 1 to 1½ mm deep. Thus they might be a normal finding in a patient who previously had Q's like these. Their increased prominence in this pt. is a finding compatible with Anter-Lateral infarction. In addition, the previously large R waves in V2-5 are absent, indicating loss of anterior myocardial tissue which normally produces this anteriorly directed vector. The elevated ST segment and now flipped T wave are common occurrences in evolving Anterior myocardial infarctions.



Miss Sarah Lou Butler presenting the Dr. Tom T. Ross Award to Dr. Edgar J. Easley for "outstanding achievement beyond the line of duty".



EDITORIAL

Problems Vexacious

Alfred Kahn, Jr., M.D.

Medicine is discussed in the media frequently in several contexts, which do not really reflect the attitude of individual physicians or organized medicine.

The medical care of the poor is a matter of great concern to all Americans, both physicians and lay people. Our capitalistic society results in socio-economic stratification, which in a large measure is formulated on and dictated by earnings—and ability to spend for goods and services. The lower socio-economic levels are at a distinct disadvantage in bidding for these goods and services; furthermore, from the poverty level upward into some of the better wage earners, there is an inability to earn enough to supply the affected families with food, clothes, shelter, and medical care. Our civilization recognizes medical care as a right, and this is incontrovertible now days. The American Medical Association in a recent bulletin has recognized the need for the less financially fortunate to have medical care. This implies the approval of free clinics where necessary; the argument that some of the people attending free clinics could forgo some material things and pay for some types of services is partly true and partly specious. Many disadvantaged people simply do not know how to handle financial affairs, and if their income is low, they simply do not always use good judgment in its apportionment. Even if they run out of funds, they still need essential medical care, and organized medicine recognizes this. The implementation of free clinics has to be on a local basis tailored to local needs. Thus, the stance of organized medicine is one of approbation rather than instigation on a national scale. It should be pointed out that approval of this type of clinic does not imply approval of bad medicine, unethical medicine, or subversion in the sense of

using medicine as a bait for other purposes. Perhaps the best type of clinic is where the patient pays something even though the amount is minute. This way, he feels that he has something of a quid pro quo.

The distribution of physicians is a vexing problem to organized medicine. The accompanying map reveals the number of people per primary care physician as published in *The Medico* (University of Arkansas School of Medicine). This shows that there are at least 8 counties in which there is only one primary physician for each 5,000 people or more. There are 11 counties in which there is at least one physician for each 1,500 people. What to do about this is an unsolved problem that individual physicians and organized medicine have given much thought. There is no ready answer. Certainly, one of the best efforts to solve the problem is the University of Arkansas School of Medicine re-emphasis on family practice training; part of this is embodied in the curriculum especially at the graduate level; part of this effort is expressed in their program of a University without walls—meaning a dissemination of teaching effort into smaller communities. A widely based teaching program such as this is bound to demonstrate that practitioners in smaller communities can participate in teaching programs which will lead him to feel that he has a close tie with modern public and private teaching institutions even though there is a geographic separation; this will greatly lessen the sense of isolation physicians in smaller communities sometimes feel.

To keep a physician happy and satisfied in a small town means a living income commensurate with his education. Loans to young physicians are often used as legitimate bait to lure them to

a small community. An adequate income plus a feeling of close association with one's colleagues is now possible through better transportation—good roads, aircraft—and better communication—closed circuit T-V, instant library research, good telephone service to larger cities, etc.

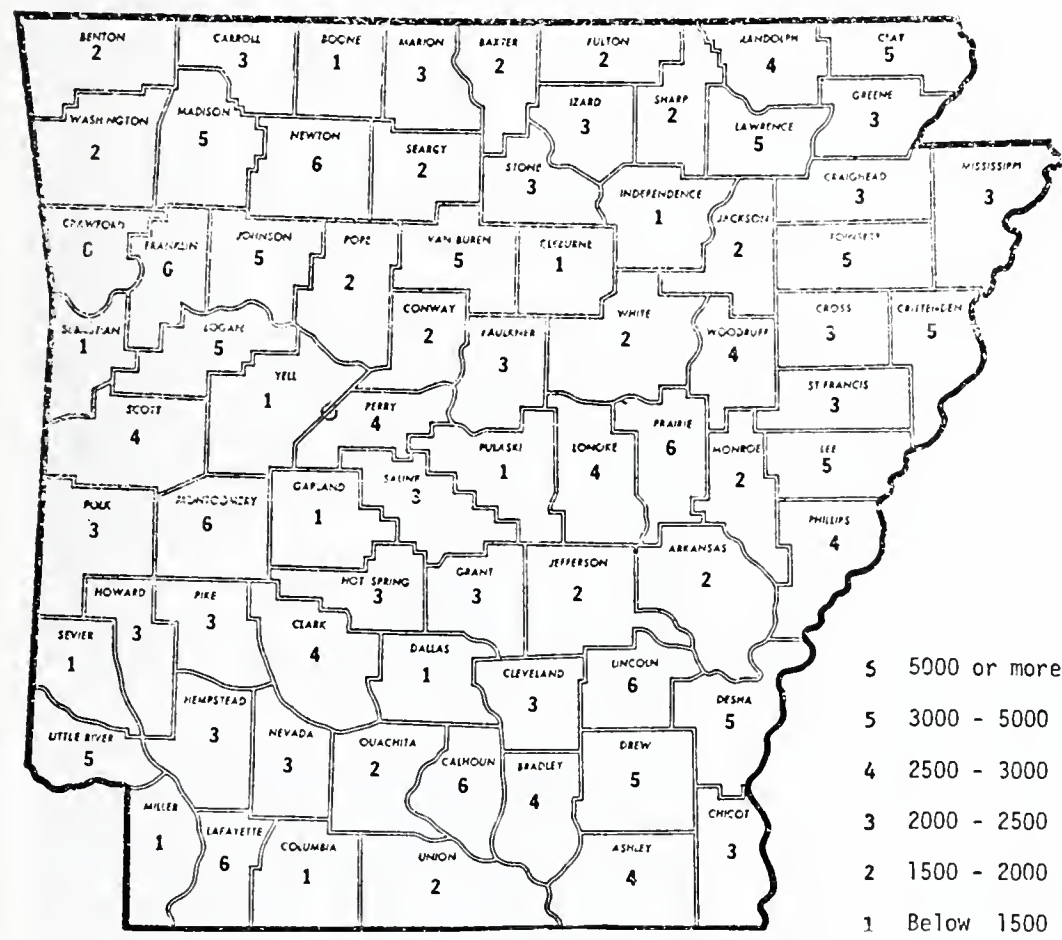
A major deterrent to smaller community practice is the fatigue factor. A solo practitioner has little or no respite. The best solution seems to be group practice in a central locus to which patients can get easy access. This probably means that every small community cannot get a physician—

and the more cogent point is that if the small community gets a solo physician, he is likely to be lost in a few years due to the fatigue factor.

The temporary expedients of small community practice in lieu of military service, threats of withholding licensure unless there is a year of local general practice, etc., have not solved this thorny problem.

The solutions to the delivery of medical care should be solved by the medical profession working co-operatively with citizen groups. The solution is not coercive government regulation.

NUMBER OF PEOPLE PER PRIMARY CARE PHYSICIAN



The Medico.
Vol. 25, No. 7, March 1973
University of Arkansas
Medical Center,
Little Rock, Arkansas

Stool Porphyrins in Acute Intermittent and Hereditary Coproporphyria

Hereditary coproporphyria, a rare form of hepatic porphyria with acute intermittent symptoms, is described in an American family. The proband, a 43-year-old man, presented with acute neurological symptoms precipitated by various unrelated tranquilizers, including meprobamate and chlorpromazine. Urinary porphyrin per-

cursors were increased in attacks and coproporphyrin 3 was increased in the urine and in large quantities in the stool. Stool porphyrins may be of value in distinguishing the three forms of hepatic porphyria with acute intermittent symptoms. In the other two forms, stool porphyrins were normal or slightly elevated in acute intermittent porphyria, and increased particularly protoporphyrin and hydrophilic X porphyrin, in variegate porphyria.

MEDICINE IN THE



THE MONTH IN WASHINGTON

Strong protests from the American Medical Association and others has led the Secretary of the Department of Health, Education, and Welfare to hold letters from Social Security's Bureau of Health Insurance that ordered Medicare and Medicaid intermediaries to augment hospital utilization review by requiring a pre-admission certification program, and the use of national, regional or other appropriate data on length of stay by diagnosis to establish extended-stay cut-off dates.

In letters and visits with HEW Secretary Caspar W. Weinberger, AMA board chairman, John R. Kernodle, M.D. urged that "...The Social Security directive be reviewed, not only from the standpoint of its validity under the Medicare law, but also with respect to its apparent pre-emption of functions given by the Congress to Professional Standards Review Organizations (PSRO).

"...We believe the purpose of an intermediary letter should be limited to administrative matters affecting carriers. If providers of service are affected we believe that any changes should be the subject of proposed regulations under which the providers and the carriers are given an opportunity to present their views. In the case of the intermediary letters under consideration, we question their validity and appropriateness at this time. We believe that they should not be issued at this time and that they would more appropriately be included in the PSRO regulations."

Social Security stated that the proposed new instructions in its intermediary letters "are intended to be supportive of the PSRO effort."

The reason for the new procedures, according to Social Security, is "increasing public concern at all levels over the need for more effective utilization of health care while maintaining or improving the quality of care rendered."

Social Security describes the new instructions as "processes that are to be employed for the period prior to the emergence of PSROs. Hospitals will require that the attending physician present appropriate documentation for use by the UR committee, or its representative, for approval of the hospital admission prior to—or at the time of—elective admissions, and within one working day subsequent to emergency or urgent admissions.

"A representative of the utilization review committee will review all applications for admission of Medicare beneficiaries; however, not all would be reviewed in the same depth. By employing a selection technique found appropriate by SSA, the utilization review committee will subject an appropriate number of the applications for admission to close, professional scrutiny. For example, the utilization review committee will be required to review intensively all questionable admissions (i.e., those involving questionable diagnosis, and treatments, for which close review is appropriate because of high cost, frequency of abuse, or propensity for potential misutilization.")

"All admissions approved by the utilization review committee will be certified by the committee for a specific duration based on appropriate percentile of past data (or other data acceptable to the Secretary). Where the committee does not approve the admission, the attending physician and the beneficiary is to be notified immediately, i.e., within 24 hours. Reviews of admissions are to be scheduled prior to or at the time of the expiration of the initial projected length-of-stay and in subsequent additional stays where the attending physician recommends and the utilization review committee approves continuing hospitalization. Appeal rights are to be provided to protect the beneficiary, hospital, and the attending physician from improper denials.

"The proposed new procedure calls not only for a change in timing of review but for analysis

of utilization review findings and the correction of problems that are identified . . . ”

Social Security said the intermediaries would conduct on-site reviews to “verify that pre-admission certifications and subsequent reviews are made timely and conscientiously.” Carriers would be required to exchange information to identify “potentially aberrant patterns of service and to take appropriate corrective action.”

* * *

Some 150 physicians representing 38 state medical associations and foundations have visited congressmen and federal officials to make a case that statewide PSRO coordinating systems should be permitted when the program is implemented.

The government has indicated it will permit statewide “umbrella” systems only in very small states though the law contains no such restriction. Chief congressional sponsor of PSRO, Senator Wallace Bennett (R., Utah,) insists the intent of the law is to bar statewide setups in larger states.

PSRO is the provision of last year’s Medicare-Medicaid amendments that calls for a structured professional review system for Medicare and Medicaid which will review initially all institutional care and later all care, including private physicians’ care.

Most of the lawmakers visited expressed sympathy for the position of the state groups and said they would transmit the concern to HEW. At a follow-up meeting HEW officials, however, indicated no change in policy is planned at this time.

Henry Simmons, M.D., Deputy Assistant Secretary for Health, said: “It appears clear that statewide PSROs would be difficult to square with congressional intent.” The legislative history of the provision, Dr. Simmons added, “makes plain” that there should be a number of PSROs in the larger states.

However, state and AMA representatives argued that there should be some arrangement under which a state-wide umbrella organization can be part of the PSRO program, and that medicine desired a condition under which those state organizations which are interested and qualified could participate in a management role in the PSRO program in their states.

PSRO Director, William Bauer, M.D., told the state representatives that he desired to be flexible

in operating the program. He said final area designations won’t be made until November at the earliest but he echoed Dr. Simmon’s assertion that larger states won’t be able to establish PSRO organizations that supervise the program throughout the state. “States with a significantly large number of physicians can be expected to have more than one PSRO,” he told the meeting.

* * *

In the exchange of communications between the HEW Secretary and AMA officials, two other stands of organized medicine were made abundantly clear.

Dr. Kernodle in a letter to the Secretary took issue with Social Security’s opposition to current procedural terminology (CPT) as a coding system for carriers. Dr. Kernodle said the AMA has spent many years and hundreds of thousands of dollars in developing “what we think is the finest and most complete description of medical and surgical procedures that is possible.”

Dr. Kernodle pointed out that the physicians of at least six states and the carriers operating in these states wish and stand ready to put CPT into operation. But Social Security continues to prohibit this on grounds that it might raise costs. Actually, Dr. Kernodle said, studies indicate that costs increases would be minimal at most and at least one state has found the use of CPT reduced costs.

“All the American Medical Association is asking is that those carriers who wish to use CPT be granted the opportunity.”

In the same letter to the HEW Secretary, Dr. Kernodle wrote: “. . . The final and most important point we wish to make (and one that is at the core of many other areas of concern) is our firm belief that medical and health matters currently under the jurisdiction of the Social Security Administration and the Social and Rehabilitation Service should be under the jurisdiction of the Office of the Assistant Secretary for Health.”

The Senate has approved a drastically reduced Health Maintenance Organization bill (69-25) after liberal forces led by Senator Edward Kennedy (D., Mass.) fell back in retreat.

The measure that finally emerged after two days of debate called for spending \$805 million over three years to encourage development of

pre-paid group practices or contract practice-type organizations. Last year, the Senate overwhelmingly voted a \$5.1 billion HMO program.

The legislation now goes to the House where a House health subcommittee has approved a \$280 million program. The Senate has been warned that any bill far exceeding the Administration's request for an experimental, \$60 million first-year plan may face a Presidential veto.

Confronted by surprisingly strong conservative opposition to the \$1.5 billion scale of the HMO bill reported by the Senate Labor and Public Welfare Committee, Kennedy was compelled to capitulate twice on the Senate floor. He first proposed a \$865 million substitute that would have relaxed many provisions of the original measure. At the end he switched support, successfully, to a Republican substitute introduced by Sens. Jacob Javits (R., N. Y.) and Richard Schweiker (R., Pa.).

The Javits-Schweiker bill authorized \$705 million. Added to this by the Senate was a \$100 million provision by Sen. William Hathaway (D., Maine) to foster HMO development in rural areas.

Kennedy said the revised bill would fund about 200 HMOs "which have been proven to work."

The bill adopted by the House Health Subcommittee several days before the Senate vote would aid about 100 HMOs at a cost of some \$280 million over three years. This bill still must be voted on by the House Commerce Committee and the House.

Criticizing the original HMO bill, Sen. Robert Taft, Jr. (R., Ohio) said the Senate would be "unwise to propagate by legislation a remedy for health care which has not yet passed any of the necessary tests. Before we even have a chance to get the test models off the ground, it is now proposed to fly with a whole fleet of HMOs."

* * *

The creation of a new Joint Commission on Medical Malpractice is being planned by major medical organizations as a means of curbing the rising number of damage claims and controlling health care costs.

Joining in the new venture would be the American College of Surgeons, American College of Physicians, American Hospital Association, American Medical Association, and representatives of medical specialty societies.

The plan was discussed by John R. Kernodle, M.D., Burlington, N. C., chairman of the AMA Board of Trustees, in a speech before the American College of Obstetricians and Gynecologists meeting in Bal Harbor, Fla.

"While the AMA has been active in the commission's formation," Dr. Kernodle said, "we are fully aware that it is only through joint action that the malpractice issue can be met.

"The commission will gather and disseminate information on the nature, frequency, costs, and causes of malpractice claims . . . and recommend equitable and appropriate ways of minimizing the claims problem."

* * *

John A. D. Cooper, president of the Association of American Medical Colleges, has blasted the Nixon Administration's proposed budget cuts for fiscal year 1974, saying they present a serious financial blow to medical education, bio-medical research, and health care.

"Without advance warning and apparently without any real understanding of the consequences of their decision," Dr. Cooper said, "the Administration is seeking to terminate support for research training, Community Mental Health Centers, Hill-Burton hospital construction, the Regional Medical Program, and capitation support for schools of Veterinary Medicine, Pharmacy, Optometry and Podiatry. In nearly all other areas of the proposed budget, the President is asking the Congress to curtail or cutback federal monies for health."

According to Dr. Cooper, federal support will be reduced 15 per cent below the level provided for in the President's amended 1973 budget which contained \$500 million less for health programs than his original fiscal 1973 budget. The FY '74 budget is 25 per cent less than the schools had anticipated.

"As a result of decreased federal funds the schools will be forced to discharge about 1400 faculty members, unless other support can be found. In addition to faculty cuts there will be a 15 per cent decrease in supporting staff positions," Dr. Cooper said.

* * *

AMA Judicial Council Ruling on Use of Physician's Name in Commercial Advertising

At its recent meeting in Washington, D. C., the Judicial Council adopted the following reaffirmation of an existing opinion:

From time to time in the past physicians have permitted the use of their names in commercial advertisements. It was not a widespread, frequent or accepted practice.

At this time the Council sees definite evidence of a break with ethical tradition. Commercial advertisement carrying the name, photograph and professional appointments of physicians are conspicuous in both public and professional periodicals.

Regardless of disclaimers and alleged educational claims for the ad, the intent of using a physician's name and photograph in an advertisement is simply to draw attention to the ad. The physician who permits his name and photograph to be so used is permitting himself and his profession to be exploited.

The Judicial Council has previously stated that it is demeaning to the medical profession for the physician to permit the use of his name and professional status in the promotion of commercial enterprises. Out of respect for his profession, a physician should not allow his name or the prestige of his professional status as a physician to be used in the promotion of commercial enterprises.

To the extent that the facts of a particular case indicate that the honor and dignity of the profession are denigrated then charges of conduct contrary to Section 4 of the Principles of Medical Ethics should be brought before and fully reviewed by the ethics committee of the physician's component medical society.

Circumstances will suggest and facts disclose whether some consideration of value was given the physician for the use of his name and photograph by the advertiser. Circumstances will indicate the purpose of the advertisement.

In view of the proliferation of advertising of this nature, the Judicial Council reaffirms its opinion:

It is demeaning to the medical profession for a physician to permit the use of his name and professional status in the promotion of commercial enterprises. A physician may freely engage in business ventures outside the practice of medicine. However, out of respect for his profession, he should not allow his name or the prestige of his professional status as a physician to be used in the promotion of commercial enterprises.

In conclusion, the Council condemns as un-

ethical the action of the physician who *is found* to place personal, selfish, financial, or venal interests ahead of the high ideals of the medical profession. The Council wishes to call this reaffirmation of its opinion to the attention of all physicians and to all ethical medical publications.

* * * *

Journal for Nurses

The Arkansas State Nurses' Association begins publication of a new magazine in September 1973. The magazine will go to all registered nurses and to students in their final year of preparation, which means circulation will exceed 4,000 persons, all of whom will be qualified to provide professional nursing service.

Classified advertising space is available at a cost of \$12.00 per column inch. Other rates are available for larger advertising. The classified section will feature a section on employment opportunities for registered nurses. For more information contact: Mrs. Alice C. Springs, Executive Director, Arkansas State Nurses' Association, 117 South Cedar Street, Little Rock, Arkansas 72205, telephone AC 501-664-5853.



THINGS



TO

COME

Seminar on Hand Injuries

A seminar pertaining to management of the injured hand, presented by the Hand Section of Plastic Surgery in conjunction with the Milliken Hand Rehabilitation Center, is scheduled for September 8, 1973, at Barnes Hospital, St. Louis, Missouri. The program is limited to "Industrial Injuries of the Hand" and is designed primarily for physicians providing the initial and definitive care of the injured hand. Program topics are: "Management of Acute Amputations"; "Management of Crush Injuries"; "Late Management of Amputation Stumps"; "Replantation and Transplantation in Hand Reconstruction"; "Fractures and Dislocations of the Metacarpals and Phalanges"; "Fractures and Dislocations of the

Carpal Bones"; "Emergency Care of the Injured Hand"; "Problem Cases"; "Management of the Stiff Hand"; and "Determining Disability Ratings of the Upper Extremity". For information write: Paul M. Weeks, M.D., Director, Milliken Hand Rehabilitation Center, 4960 Audubon Avenue, St. Louis, Missouri 63110.

Conference on Practical Neurology and Psychiatry

A conference on "Practical Neurology and Psychiatry" will be held October 13, 1973, at the Scott and White Memorial Hospital in Temple, Texas. The conference will present a practical approach to common office problems including cerebrovascular disease, headache, back pain, anxiety and depression. Recent advances in

medical and surgical treatment of nervous disorders will be reviewed. Dr. Joe Foley, Department of Neurology, Western Reserve University; Dr. John Goodman, Department of Psychiatry, University of Texas Medical Branch, Galveston, and members of the medical staff of Scott and White Clinic will participate in case presentations, workshops and demonstrations. The conference is acceptable for Category I credit for the American Medical Association's Physician's Recognition Award. Conference registrants may wish to purchase tickets to the University of Arkansas-Baylor University football game, Saturday evening in Waco (35 miles north of Temple). For further information contact: Department of Education, Scott and White Memorial Hospital, Temple, Texas 76501.



P E R S O N A L A N D N E W S I T E M S

Dr. McPhail Elected

Dr. Jasper L. McPhail, cardiac surgeon at Arkansas Heart Institute at Baptist Medical Center and Director of the School of Health Sciences of State College of Arkansas, has been elected a Fellow of the American College of Cardiology. Fellowship is limited to specialists in cardiovascular diseases who have made significant contributions in education, research and patient care in this field. Dr. McPhail, who trained under Drs. DeBakey and Cooley at Baylor in Houston, Texas, is well known in both the field of cardiac surgery and medical education.

Dr. David Attends Reunion

Dr. N. C. David of Brinkley attended the twentieth annual reunion of the University of Arkansas School of Medicine's Class of 1953. The reunion was held in Little Rock June 8, 9, and 10th.

Dr. Gustavus Relocates

Dr. John Gustavus, who formerly practiced in DeQueen, has opened the Levy Medical Clinic in North Little Rock. The clinic was previously occupied by the late Dr. W. Myers Smith.

Dr. Harrel Appointed

Dr. John A. Harrel, Jr., of Little Rock, was officially appointed and duly commissioned as the Director of the Arkansas State Department of Health on July 2, 1973. Dr. Harrel had served as Acting Director of the State Health Department since January 1972.

Members' Articles Published

An article entitled "Congenital Absence of the Lumbosacral Spine" by Dr. John F. Redman of Little Rock, and an article entitled "Use of the Autogenous Jugular Vein for Interposition Grafting in Portal Hypertension" by Dr. Bernard W. Thompson and Dr. Raymond C. Read of Little Rock, were published in the July 1973 issue of the *Southern Medical Journal*.

Dr. Palmer Tours Red China

Dr. H. C. Palmer of Searcy accompanied the United States College All-star Basketball Team on a three-week tour of the People's Republic of China. The United States team met the Chinese National team on the basketball court in Canton. Dr. Palmer serves as team physician for the Harding College Bisons.



NEW MEMBERS

Dr. Sumner Regenold Cullom

Dr. Sumner R. Cullom has been accepted for membership in the Mississippi County Medical Society. Dr. Cullom was graduated from Vanderbilt University in 1967, and in 1972 he was graduated from the University of Arkansas School of Medicine. He completed his internship at the City of Memphis Hospitals, Memphis, Tennessee.

A family physician, Dr. Cullom is associated with Dr. Eldon Fairley and Dr. Julian Fairley in the practice of medicine at the Fairley Clinic, 616 West Lee Street in Osceola.

Dr. Robert C. Power

Dr. Robert C. Power, a native of Lockesburg, Arkansas, is a new member of the Pulaski County Medical Society. His pre-medical education was received at the University of Arkansas in Fayetteville, from which he was graduated in 1956. In 1960 he was graduated from the University of Arkansas School of Medicine. He also completed his internship at the University Medical Center. Dr. Power served in the United States Army from 1961 until early 1973. From 1964 until 1967, he was in residency training in Internal Medicine at Brooke General Hospital in San Antonio, Texas, and he held a Fellowship in Gastroenterology from 1969 until 1971 at the same institution. He served as an instructor in medicine at the University of Texas Medical School at San Antonio from 1961 until 1973. Dr. Power is Board Certified by the American Board of Internal Medicine. He is associated with Dr. Donald G. Browning and Dr. Thomas J. Smith at 409 North University in Little Rock and specializes in Gastroenterology.

Dr. Max Alden Baker

Dr. Max A. Baker is a new member of the Sebastian County Medical Society. He was born in Arcola, Missouri.

He attended St. Louis College of Pharmacy, receiving a B.S. degree in Pharmacy in 1961, and Washington University, St. Louis, Missouri, before entering the Washington University School of Medicine, from which he was graduated in 1966. He interned at Genesee Hospital in Rochester, New York, and his residency work in Psychiatry was at the Renard Hospital in St. Louis. Dr. Baker served as a clinical instructor in Psychiatry at Washington University School of Medicine. He served with the United States Public Health Service in Washington, D. C., from 1970 until 1972. Since July 1972, Dr. Baker has been associated with Dr. Donald Chambers and Dr. Joe Dorzab in the practice of Psychiatry at 624 Adelaide in Fort Smith. He is Board Certified by the American Board of Psychiatry and Neurology.

Dr. William F. Harrison

The Washington County Medical Society has added the name of Dr. William F. Harrison to its membership roll. Dr. Harrison was born in Conway, Arkansas. In 1963 he received a B.A. degree from the University of Arkansas and in 1968 he was graduated from the University of Arkansas School of Medicine. His internship as well as his residency work in Obstetrics and Gynecology was at the University Medical Center. Dr. Harrison served as a clinical instructor at the University of Arkansas School of Medicine.

For the past year, Dr. Harrison has been in the practice of Obstetrics and Gynecology at 207 East Dickson in Fayetteville.

Dr. Norman G. Tubb

A new member of the Washington County Medical Society is Dr. Norman G. Tubb, a native of Benton, Arkansas. Dr. Tubb received a B.S. degree from Hardiug College in Searcy, Arkansas, in 1964 and was graduated from the University of Arkansas School of Medicine in 1968. He completed his internship at the University Medical Center. His residency work in Pathology was at the Veterans Administration Hospital in Little Rock and the Mercy Hospital in Des Moines, Iowa.

Dr. Tubb practiced two years in Des Moines before moving to Springdale in 1972. Dr. Tubb's office for the family practice of medicine is located at 1217 South Thompson.



OBITUARY

Dr. J. Max Roy

Dr. J. Max Roy of Forrest City died June 17, 1973, at the age of fifty-eight. He was born October 21, 1914, in Jackson, Tennessee.

Dr. Roy was graduated from the University of Tennessee College of Medicine in Memphis in 1941 and began practicing medicine in Forrest City in 1942.

He was a member of the St. Francis County Medical Society, the Arkansas Medical Society, the American Medical Association, and the Mid-South Medical Association; a member of the Graham Memorial Presbyterian Church, a Mason and a Shriner.

Dr. Roy is survived by his wife, Mrs. Janice Campbell Roy, one son, two daughters, and two grandchildren.

* * *

Dr. Kenneth A. Siler

Dr. Kenneth A. Siler of Harrison died June 23, 1973. He was born February 14, 1905, in Van Wert County, Ohio.

Dr. Siler was graduated from the University of Arkansas School of Medicine in 1945. He practiced in Dumas, Little Rock, Rogers, and Siloam Springs before moving to Harrison in 1959.

He was a member of the Boone County and Arkansas Medical Societies, the American Medical Association, Southern Medical Association, the American Academy of Family Physicians, and a staff member of the Boone County Hospital. Dr. Siler was a member of the First United Methodist Church, the Kiwanis Club, and the Ham Radio Society. He was a Mason and a member of the Boy Scouts of America.

Survivors include his widow, Mrs. Dollie Ward Siler, one son, two daughters, one brother, one sister, and eight grandchildren.

* * *

Dr. W. Myers Smith

Dr. W. Myers Smith of North Little Rock died June 10, 1973, at the age of sixty-six. Dr. Smith was born January 22, 1907.

He was graduated cum laude from the University of Illinois, and was graduated from the University of Arkansas School of Medicine in 1932. He received a Master's Degree in Public

Health from Harvard University, graduating magna cum laude.

Dr. Smith had been in private practice in North Little Rock since 1947. He was a staff member of the Memorial Hospital in North Little Rock and St. Vincent Infirmary in Little Rock. He was a member of the Pulaski County and the Arkansas Medical Societies, the American Medical Association, a charter member and Fellow of the American Academy of Family Physicians and the Arkansas Academy of Family Physicians. Dr. Smith was a Methodist, a member of the Levy Masonic Lodge and the Fraternal Order of Eagles, and was president of the International Brotherhood of Magicians, Ring 29. He served in the Army Medical Corps during World War II and the Korean War.

Dr. Smith is survived by his widow, Mrs. Allene Boyd Smith, two sons, two daughters, his mother, one brother, and four grandchildren.



Inappropriate Antidiuretic Hormone Secretion

R. Brisman and A. M. Chutorian (710 W 168th St, New York)

Arch Neurol 23:63-69 (July) 1970

A child with a hypothalamic glioma, neurofibromatosis, and in appropriate antidiuretic hormone (ADH) secretion as verified by bioassay and balance studies is reported. A normal intraventricular CSF ADH level suggested that the tumor, which extended into the third and lateral ventricles, was not autonomously producing ADH. Inappropriate ADH secretion was probably secondary to impaired hypothalamic function caused by an infiltrating glioma. The hypothesis that cyclic-AMP (adenosine 3'5'-phosphate) is the intracellular mediator of ADH was supported by appropriate fluctuations of urinary cyclic-AMP with ADH secretion. Atypical features included a normal response to an acute water load, occasional failure to respond to severe fluid restriction, failure to elevate serum sodium in response to hypertonic saline or ethanol, the discontinuous secretion of a measurably elevated ADH, and the positive response to mineralocorticoid therapy in spite of normal aldosterone excretion. All these findings are compatible with inappropriate secretion of ADH and the failure to secrete a maximally dilute urine. The alternate hypothesis of malfunction hypothalamic osmostat is suggested.

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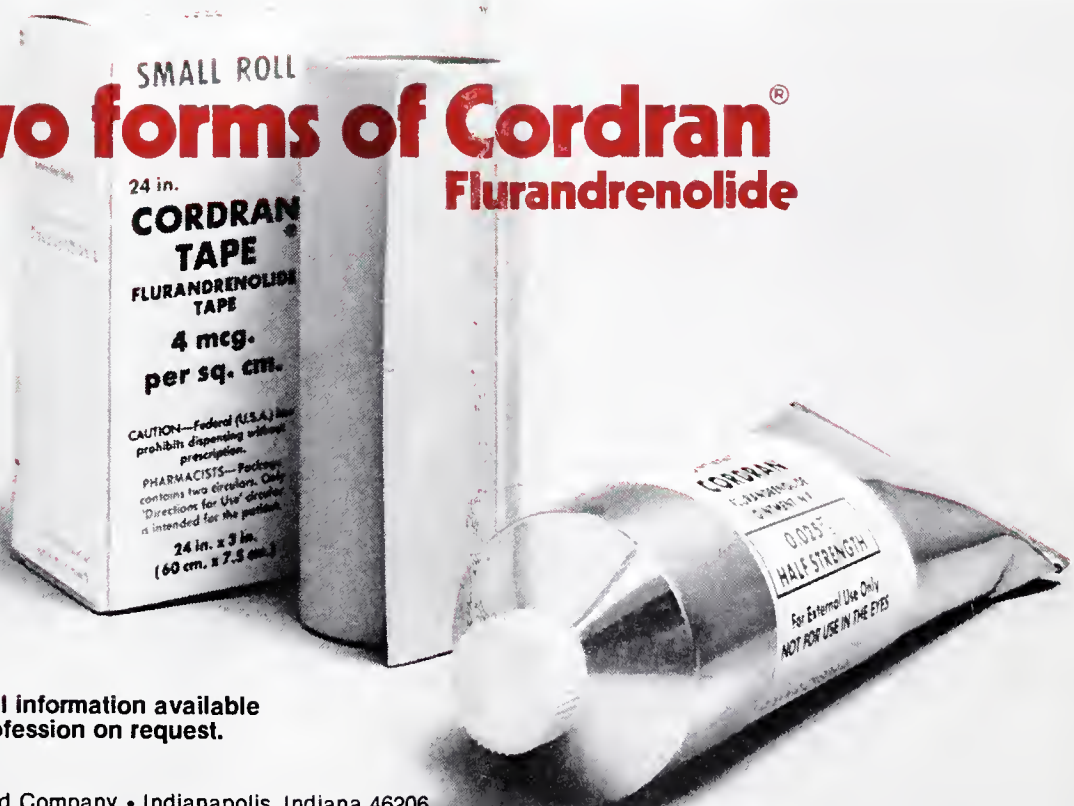
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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 4. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.



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Ambulatory Management of Peptic Ulcer

William A. Sodeman, Jr., M.D.*

Successful ambulatory management of peptic ulcer implies that you heal the ulcer without extracting the patient from his environment for longer than necessary for basic diagnostic studies. Unsuccessful ambulatory management means a failure to heal that precipitates hospitalization and/or convalescence and requires a longer aggregate time than might have been the case had more restrictive management been employed earlier. Unsuccessful management increases the cost to the individual, to the community and adds to the burden on the medical resources. Hospitalization or confinement offers some measure of external control over diet, medication and activity and, for better or worse, has become identified with strict or rigid management. By default, and perhaps improperly, ambulatory care has come to represent a more liberal or permissive ulcer program. Successful ambulatory management conserves resources — medical, community and family — and is an eagerly sought after goal. The dependent variable with regard to ambulatory management is the selection of the patient.

At the present time there are not outstanding new drugs or new regimens that will change the therapy of idiopathic acid peptic disease. When there are identifiable predisposing factors, therapy must include some considerations for the primary factors, but diet, antacids and anticholinergics remain the tools of choice. This is not to say that there are not new drugs; there are, and they present a variety of drug actions not heretofore available. There are licorice derivatives that appear to stimulate gastric mucus production, antipepsins and antigastrins. Though these offer new modalities of therapy, none of them has yet been approved for use in this country, and where they are used, they have not revolutionized the therapy of acid peptic

disease. There also are differences in regimens; however, no clear advantage exists for one or the other at the present. Rigid management doesn't produce a better regimen; it just affords the confidence that the patient has followed it.

I still believe in Schwartz' dictum: "no acid—no ulcer". The clinical response to this is a hopeful "less acid—healing ulcer" approach. Success remains a matter of matching the patient with the therapy.

Three varieties of problems should cause one to question the use of ambulatory management at the outset. First, the presence of severe disease which often means the presence or suspicion of a complication. Second the presence of ulcerogenic factors that require some primary treatment. The third is the circumstance where prompt healing is necessary to confirm a diagnosis. This is a matter of particular importance when there is a question of gastric carcinoma versus gastric ulcer.

If an otherwise healthy 29-year-old auto mechanic presents with recent onset of late postprandial mid-epigastric burning relieved by food, he should have a duodenal ulcer. A niche in the duodenal bulb at upper gastrointestinal examination will confirm this. If he presents with no complications, acute hemorrhage, obstruction, penetration or perforation; if he has no predisposing cause, salicylates, steroids or other ulcerogenic drugs; if you cannot find an underlying disease, hyperparathyroidism, Cushing's Disease, chronic lung disease, or gastrin secreting tumor; if there is no identifiable, environmental, or emotional stress, then he is an ideal candidate for ambulatory management. Almost any combination of diet and/or antacid and/or anticholinergic with a little physician support will heal his ulcer. Most people would probably heal without the specific therapy as the number of deformed bulbs in patients with negative peptic histories testifies. Here I have obviously eliminated the question of complications,

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made the various ulcerogenic factors negative and there is no gastric ulcer.

The point to be considered is what weight should be attached to each of these factors as a part of the decision whether to use ambulatory management or whether to extract the patient from his environment.

The easiest factors to consider are complications. Massive hemorrhage, perforation, penetration and obstruction are clearly problems incompatible with ambulatory management. Perforation and penetration are difficult for patients to conceal. Acute hemorrhage, however, may be so slowly reflected in the hemoglobin or hematocrit that it may not be obvious. A fall in these two parameters reflects compensation, by dilution, for hypovolemia and this takes time. From the other side, not all reported coffee ground emesis or black stools represent acute hemorrhage. The absence of postural tachycardia or postural hypotension is a far more reliable indication that a reported dark stool is a spurious observation. Patients can tolerate an outstanding degree of obstruction uncomplainingly. Only a radiologist or a Levine tube can define the problem. It suffices to say that complications are contraindications for ambulatory management.

In the strictest terms the pathophysiologic mechanisms leading to the development of peptic ulcer remain unidentified. This is because it is almost impossible for a single factor to be the sole precipitating cause. The answer to the question of why this patient developed an ulcer today as opposed to last week or why in the posterior wall as opposed to the anterior wall of the bulb is not clear. There must be partial inadequacy of some of the many local and systemic mechanisms that defend gastric and duodenal mucosa from ulceration.

It is foolish, at least at this time, to expect to pinpoint the failures of each of the defense mechanisms. It is just as foolish to say that peptic ulcers are idiopathic and all therapy must be empiric. There are a host of ulcerogenic factors whose presence or absence can be and must be verified to permit empiric therapy. Some are identifiable, like the level of the serum calcium, but others fall in the less easy to define emotional and environmental areas. I have divided the ulcerogenic factors into 3 groups: predisposing agents, underlying diseases and emotional

and environmental factors. The strongest priority probably goes to predisposing agents. These are usually drugs, but dietary factors may play a role. The classes of drugs commonly involved are the anti-inflammatory agents, Reserpine and its derivatives and several of the anti-metabolites and the immuno-suppressive drugs. Usually only the salicylates are elusive enough to be difficult to ferret out in a history. They hide in endless variations of proprietary drugs including a number designed explicitly for relief of acid indigestion. Failure to recognize drugs as a factor in peptic ulceration leads inevitably to failure of healing and a prolonged course.

Most dietary relationships in acid peptic disease seem to be idiosyncratic more often than they are rational; however, there are two agents whose roles as ulcerogenic factors seem clear. These are caffeine carried to excess and alcohol. Both are well recognized gastric stimulants and both have an insidious way of creeping into the diet in excess. Two or three cups of coffee a day buffered with milk and food are rarely harmful to a patient with an ulcer; however, when this escalates to 10 cups of black coffee it can be the ruination of an otherwise reasonable ulcer program. Identification of these factors, drugs, and diet requires only persistence in history taking; thus, the priority of their identification is high.

The next broad category of factors is underlying diseases. A number of systemic illnesses have an associated increase in frequency of peptic ulceration. Some of these are completely incompatible with any consideration of ambulatory therapy. Stress ulcers occur in conjunction with major trauma, surgery, head injuries, brain tumors, and extensive burns. The ulcer may indeed be the final blow that the patient has to bear, but the management of the ulcer is determined more by the primary problem.

In chronic obstructive lung disease, syndromes of steroid excess, hyperparathyroidism and the Zollinger-Ellison syndrome, the primary problem may be less apparent. The association between chronic obstructive lung disease and peptic ulcer remains unproven; however, the clinical associations occur frequently enough to warrant consideration of bronchial toilet as a primary factor in the treatment of peptic ulcers that occur in bronchitics. Similarly, steroids both exogenous and endogenous are factors in the development of peptic ulcer. They are thought

to potentiate a pre-existing ulcer diathesis. It is possible to heal ulcers in the face of continued steroid medication but it requires optimum control. Needless to say, steroid dosage must be reduced to the lowest level compatible with the primary disease. Hypercalcemia is a stimulus to gastric secretion. Peptic ulcers are accordingly increased in frequency in hyperparathyroidism. A screening serum calcium would seem to be in order during the course of management of all peptic ulcer patients. It is clear that serum calcium levels may fluctuate in individuals who have hyperparathyroidism, and this is at best an elusive diagnosis. The question of hyperparathyroidism, then, is usually one to be pressed more aggressively as therapy fails and the ulcer recurs.

A gastrin secreting tumor, the Zollinger-Ellison syndrome, is obviously another underlying disease to be considered. While early descriptions of the syndrome were of individuals with what appeared to be malignant acid peptic disease with features such as jejunal ulcers, it now becomes clear that the early ulcerations produced by Zollinger-Ellison syndrome may be indistinguishable from those patients with more conventional idiopathic acid peptic disease. Again for practical reasons it seems to be a question that might be pressed more vigorously as therapy fails. Accurate gastric secretory studies and serum gastrin determinations remain the only effective diagnostic tools. These tests are time-consuming, or uncomfortable, or expensive. Their proper timing in the evaluation of acid peptic disease is not yet clear.

In any event, the complication of acid peptic disease by one of the underlying diseases will clearly affect the success of any kind of management, ambulatory or otherwise. Treatment of the underlying disease becomes the primary factor. Obviously, as additional ulcerogenic factors are identified, the group of patients who have simple idiopathic acid peptic disease will grow smaller, and our therapeutic potential will grow sharper.

For all of the factors that I have mentioned to this point, the endpoints, while they may be

more or less difficult to achieve, have at least been clear. I have deliberately ignored factors of disturbed physiology which we can measure and which must be important but which, as yet, defy interpretation or modification so they may be of little clinical use. These factors include gastric mucus, gastric emptying, the gastrin-secretin-enterogastrone response and the like. This leaves us with the area of the emotions and the environment. In dealing with emotional and environmental ulcerogenic factors, one is dealing with an area in which endpoints are substantially less clear. Emotional factors play a greater or lesser role in the development of all peptic ulcers. There are, however, relatively few individuals where their role is clear enough to permit one to identify some aspect of the patient's environment as a factor with enough clarity to permit you to use it in a decision about therapy. When you make such an identification, when you can clearly identify an environmental or emotional factor, then it does spell trouble. An ambulatory program is one that is designed not to remove an individual from his environment. One should always remember that it is as easy or easier to over-read emotional factors than it is to over-read an X-ray. Priorities are hardest to establish in this area.

Throughout this presentation I have tried to emphasize and outline factors which were reasonable to identify at the initiation of therapy and which should help one modify the approach to a treatment of acid peptic disease and, needless to say, improve the result. Little has been said about programs. Even the most casual review of the literature will reveal that any program from the most permissive to the most rigid has been shown to be successful in some group of patients with acid peptic disease. I do not mean to malign anyone's favorite program for peptic ulcer. If you have one that works, use it. It should be clear though that somewhere in the literature will be reported a program differing in all key points from yours and successful at least for the author. Everyone has mostly successes and a few failures. The only thing which is not successful is no program at all.



Bromism: A Persistent Peril

Jerry D. Blaylock, M.D.*

Introduction

Bromide is readily accessible to the seekers of an over-the-counter cure for headache, nervousness, tension or insomnia. It can be found in various inexpensive products sold in drug stores or supermarkets, airport terminals or hotel gift shops. The ion affords transient relief at best, and for a sustained effect several doses a day may be required. When such a pattern becomes established, the stage is often set for bromism.

Every pharmacy in the Little Rock-North Little Rock metropolplex was surveyed in January of 1973 and found to sell proprietary bromide-containing products. All but one of these stock Miles' Nervine, but even this store maintains an ample supply of other bromide-containing products.

Pharmacists are aware of the bromide hazard, yet continue to dispense the drug upon request. The F.D.A. is likewise as cognizant, but continues to permit pharmaceutical manufacturers to market proprietary medications containing bromide, even though there is no valid reason why bromides should be made available in over-the-counter preparations. The incidence of bromism is reason enough to ban the sale of bromide-containing products.

From a therapeutic standpoint, the bromide ion commands a very minor role in modern medicine. A century ago it was commonly prescribed for its anticonvulsant and sedative effects; now superior medications are available for these purposes.

Today, although rarely prescribed, bromide poses a substantial hazard since it is readily available to the public. Bromide intoxication is hardly a malady of the past and if we persist in relegating bromism to such an obscure niche, then we will continue to misdiagnose and maltreat this poisoning of significant morbidity, not without its mortality, nor without consequential incidence.

Incidence

During 1972, while I was Chief Resident in Psychiatry, four cases of bromism were diagnosed and treated on our service at the University of Arkansas Medical Center in Little Rock. The

patients were referred from various areas of the state by their physicians who had apparently overlooked the possibility of bromide intoxication and saw the patient as suffering only from an "emotional" or "psychiatric illness." In each of our cases an underlying psychiatric disorder was later discerned, but the immediate problem at the time of referral was the bromism.

It was reported in 1965 that 2% of patients admitted to a psychiatric hospital had clinical bromism.¹ The cases of bromism we treated in 1972 comprised 2.3% of the total number of adults admitted to the psychiatric service. Bromism continues to be sufficiently prevalent that some advise that a serum bromide determination should be done routinely in every admission to a service for psychotic cases.²

Twenty-five cases of bromism reported in the literature within the past decade that have been catalogued in the *Index Medicus* were selected and reviewed. Of these, 80% were females. According to data derived from the same cases, bromism most frequently occurs in middle age. The average age for females with bromism in these cases was 45 years, and was 58 years for the male patients. (Our four patients were females between the ages of 43 and 52 years.)

Of the 25 cases reviewed there were two deaths reported, one from pulmonary complications and the other from cardiovascular collapse. The mortality rate may not be as high as this cursory review of a small number of cases might imply. However, a search of the literature failed to find documentation of a mortality rate for bromism.

Case Abstracts

A capsule summary of the clinical picture of the four patients treated in 1972 for bromism on the psychiatric service at the University of Arkansas Medical Center follows.

Case I. This 52-year-old Caucasian lady, with a previous history of drug dependence, was referred because her physician suspected "she was on something again." She was ataxic, drowsy, irritable and emotionally labile. She was disoriented as to time, had moderate memory impairment, and experienced auditory hallucinations, paranoid in nature. She frequently resorted to confabulations. Her tongue was furred

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and her speech slurred. She complained of a constant epigastric discomfort, cramping in nature. She was tremulous, had a positive Romberg, extensor plantar responses on the right, asymmetrical DTR's, and absence of the gag reflex. There were no skin lesions. The initial serum bromide level was 258 mg. per 100 ml.

Case II. This 49-year-old Caucasian lady was initially seen by her physician when she was in a near comatose state, interpreted to be "catatonic." She was referred for admission and at that time was disoriented to time and place. Her speech was slurred, her memory markedly impaired, and she could provide no details as to her history. She was very seclusive and experienced auditory and visual hallucinations. She was markedly ataxic, had a positive Romberg, hyperreflexia, absence of the gag reflex, impaired coordination and would pick at her clothing and bed clothes. Her serum bromide level upon admission was 320 mg. per 100 ml. She had taken Miles' Nervine "for years" according to family members.

Case III. This lady, a 43-year-old Negro, was referred for "manic-depressive illness, manic phase." She had delusions of grandeur, a marked pressured speech and flight of ideas. Psychomotor agitation was extreme and physical restraint had to be employed initially. She was oriented to person only. Religiosity dominated her thoughts and conversation. There was no ataxia, but there was a history of "awkwardness" at home. There were no skin lesions or furring of the tongue. For several weeks she had been taking Miles' Nervine in order to better cope with an anxiety provoking situation at home. Her serum bromide level was 247 mg. per 100 ml.

Case IV. Drowsiness, tearfulness, anorexia with a 10-15 pound weight loss, a diminished libido and inability to concentrate were the presenting symptoms of this 48-year-old Caucasian lady referred for treatment of her "depression". In addition, there was found to be tremulousness of the extremities, a diminished gag reflex, bilateral ptosis, asymmetrical deep tendon reflexes, episodic confusion and lapses of memory. Her serum bromide was 180 mg. per 100 ml., the patient having taken Miles' Nervine "off and on for years" because her mother "had had good results with it."

Bromide-Containing Products

Capitalizing upon its capacity for CNS de-

pression, thereby producing some degree of sedation and analgesia, certain pharmaceutical houses produce proprietary medications containing bromide which are marketed as nerve tonics, headache remedies, and sleeping aids. Use of these agents leads to the vast majority of reported cases of bromism. The most common offenders, according to the cases reviewed, are Miles' Nervine, Broma-Seltzer, Nytol, Carbrital, Peacock's Bromides, in addition to others.

Patients also become bromide intoxicated when taking medications prescribed by their physician, especially if the patient surreptitiously medicates himself with "extra" doses. Such medications include Neurosine (which contains over one gram of the bromide ion in each dose!), Neo-Sedaphen, Fello-Sed, and undoubtedly others.

The Food and Drug Administration was asked for a listing of all compounds available either over-the-counter or by prescription which contain the bromide ion or which are metabolized to release a free bromide ion. No such list exists in the United States, however, at the present time.³

Pathophysiology

Although known to depress the central nervous system (except the medulla), the mechanism of action of the bromide ion *in vivo* is relatively unknown, based upon review of standard pharmacological and physiological reference works. It was learned that most of the tissues and organs of the human body are quite insensitive to the ion. For example, no damage occurs in a heart that is perfused by blood which has had each chloride ion replaced by a bromide.⁴ Neurons, and to a lesser extent the erythrocytes, are the most permeable and it is in these cells and the extracellular fluid compartments that most of the ingested bromide is concentrated. For practical purposes, the bromide space is equivalent to the chloride space.

In large doses the ion is a gastric irritant, a fortunate characteristic since an "overdose" cannot be retained. This in itself precludes an "acute" intoxication, and fatalities by acute ingestion are unknown.

Bromide intoxication is chronic in nature and fatalities from chronic ingestion are recorded.⁵ About one hour after ingestion the tissue level is reached, and some six hours later the ion has made its way to the CNS. As bromide accumulates the concentration of chloride is decreased

so that the amount of halide in the body remains constant at approximately 100 meq per liter. It is excreted slowly by the kidneys with a normal half-life of 12 days. Renal tubular reabsorption of bromide is somewhat more efficient than that of chloride⁶ so that the ratio of bromide to chloride in the urine is always lower than that in the plasma. This forms the basis for present-day treatment regimen.

The normal bromide content of the serum varies between 0.33 mg. and 1.73 mg. per 100 ml. The average daily dose of a bromide-containing preparation contains between 2.0 and 4.0 grams of the bromide ion. To guard against intoxication, the patient's daily salt intake should be two to three times the daily amount of bromides taken. To reiterate, such a person needs to take between 6 and 12 grams of salt daily! It has been demonstrated that equal doses of chlorides and bromides leads with certainty to an intoxication in about seventeen days to three weeks.⁷

There exists confusion as to exactly what the toxic bromide level is. All agree that a level above 150 mg. per 100 ml. is toxic, and most are in general agreement that levels above 300 mg. per 100 ml. are potentially lethal. However, there are numerous cases of intoxication reported with a level considerably less than that. Boyles has reported a case in which the serum bromide level was only 60 mg. per 100 ml.⁸ It would appear best that we be highly suspicious of any level above 50 mg. per 100 ml., and that a level of 100 mg. per 100 ml. in a symptomatic patient be considered confirmatory until firmly established otherwise.

Toxicity is directly related to the physiological status of the individual, and whether the mental or physical signs predominate depend upon the underlying constitution and personality of the individual. In general, the older the individual the greater the liability to intoxication. Furthermore, arteriosclerosis, malnutrition, debilitation, dehydration, anemia, organic heart disease, emphysema, tuberculosis, renal disease, endocrine impairments and organic brain disorders render the patient more susceptible to intoxication. The epileptic, on the other hand, seems to tolerate a higher level than nonepileptic patients.

There is no correlation between the symptoms manifested by the patient and the level of serum bromide, nor does the development of clinical bromism depend only on the concentration of

the ion in the blood but on the length of time, as well, that this concentration has been maintained. Nor does recovery depend solely on the serum level, but rather on the extent of cerebral damage and on the capacity of the brain to recover. EEG changes (diffuse slow wave activity) are observed in most patients around 50 mg. per 100 ml. The EEG may remain abnormal for weeks or even months following full clinical recovery.

Bromism has its own peculiar vicious cycle in that what was once situational anxiety or habitual insomnia is now for the intoxicated patient a multitude of uncomfortable sensations. In an attempt to control what are now signs and symptoms of bromism, the patient takes more and more of the bromide-containing preparation. This may continue until he becomes comatose, or if he is more fortunate, until he is brought to the attention of an alert physician. Failure to diagnose the illness at this point can be disastrous if ingestion of the drug is continued.

Signs and Symptoms

In the consideration and evaluation of signs and symptoms, it must be remembered that they are protean in nature and the clinical picture may mimic numerous other entities, including what may appear to be an obscure psychiatric illness.

It must also be remembered that the bromide level per se is not of sole importance, for the patient's over-all physiological and psychological status prior to the intoxication will to a significant extent direct and determine the symptomatology made manifest. A past history of mental illness or a personality disturbance will contribute substantially to the type of psychiatric symptoms precipitated or released by the intoxication.

The manifestations of bromide intoxication are for the most part limited to three systems: the CNS, the gastrointestinal, and the integument. Those resulting from effects on the CNS are the most numerous and of far greater import.

Disorientation, tremulousness, ataxia, memory impairment, hallucinations and delusional thought process usually paranoid in nature are the most common neuropsychiatric signs and symptoms. Impaired coordination, positive Romberg, absence of the gag reflex (quite common), hyperactive or asymmetrical deep tendon reflexes, dysarthria, generalized muscular weak-

ness, drowsiness progressing to stupor and coma, pupil abnormalities, inability to concentrate, manic behavior, confabulation and flight of ideas frequently are observed in the bromide intoxicated patient.

The abnormal EEG findings have been mentioned previously. Elevation of the cerebrospinal fluid pressure and protein content are also well documented. Other than the elevated serum bromide level and CSF and EEG abnormalities, there are no known laboratory aberrations.

Because the psychiatric symptoms so frequently dominate the clinical picture and are so often schizophrenic-like, it is not unusual for the patient to be admitted to a psychiatric service, sometimes under court order. One may wonder just how many "acute psychotic cases" are actually cases of chronic bromide ingestion. It has been shown that many patients with *unrecognized* bromism have been given shock treatments which they did not need.⁹

Gastrointestinal signs and symptoms include anorexia with accompanying weight loss, nausea, vomiting, diffuse abdominal tenderness, furred tongue, and constipation. Anorexia and the furring of the tongue are the most frequent GI occurrences. Some patients will volunteer that their tongue feels "dry" and this should prompt the physician to examine the tongue. If it is "furred", he should become highly suspicious that the patient is bromide intoxicated.

Findings in the integument, if they occur at all, are either a dryness of the skin or a macular rash. Of the two dryness is the most prevalent in cases of bromism. The so-called bromoderma or bromide acne occurs so infrequently that it is not a reliable indication of toxicity. When the lesions do occur, they are often large and primarily on the legs. Of the 25 cases reviewed, only four were reported as having involvement of the integument. Furthermore, none of our four patients had bromoderma.

Signs and symptoms are as variable as they are sundry. Except for the integument, it is not unusual for a symptom to be present one day and absent the next. Even complex signs (such as an extensor plantar response) may appear and/or disappear within a matter of hours. Remissions and exacerbations with or without sudden changes in the mental status are the rule rather than the exception.

Treatment

The treatment of bromide intoxication ultimately lies in ridding the body of the bromide ion. Various methods of treatment, including hemodialysis,¹⁰ have been described. Most treatment modalities rely upon the physiological principle that as the chloride excretion increases, so does the bromide. All attempts at diuresis which induce chloruresis therefore increase the excretion of bromide.

Adamson, et al, described the use of ethacrynic acid, hypertonic mannitol, and isotonic saline in the treatment of bromism, decreasing the serum bromide half-life to 1.65 hours, which compares very favorably to the results obtained with hemodialysis.¹¹ This use of ethacrynic acid and hypertonic mannitol must be rigorously and cautiously employed and is recommended only if the poisoning is severe. Adamson's patient had a serum bromide concentration at time of admission of 360 mg. per 100 ml., which is above the level considered to be potentially lethal.

The method used in treating our patients was similar to that first described by Hussar and Holley who combined the administration of ammonium chloride with a mercurial diuretic (Mercurydrin).¹² They found that Mercurydrin and ammonium chloride increased bromide excretion an average of 130%, noting that ammonium chloride potentiates mercurial diuretics and can be administered to patients whose sodium must be restricted.

Since none of our patients required fluid or salt restriction, they were treated with sodium chloride (up to 2 gm tid), ammonium chloride (2.5 gm tid), and various fluids (up to 4 liters daily), all administered orally. Mercurydrin, 2 cc, was administered intramuscularly daily or every other day for a total of four to five days, depending upon each individual patient response. Serum electrolytes were monitored.

Patients who have been bromide intoxicated characteristically do not promptly become asymptomatic once treatment is begun. Return to the premorbid state may take two weeks or longer, but with treatment the prognosis is good.

Our patients exhibited neurological aberrations (including impaired coordination, tremulousness, positive Romberg, asymmetrical reflexes, Babinski's sign, and ataxia) that persisted in an episodic nature and in various combinations from time to time, for as long as two weeks

in one case. Mental impairment (evident as disorientation and/or confusion) of varying degree was also episodic and generally more persistent than the neurological abnormalities. Delusional thought process and/or hallucinatory activity were abated early in the course of treatment by the use of chlorpromazine, our use of which will be briefly described later.

These episodes per se, reminiscent of a mild "relapse," were not found to be temporally or causally related to the rebound phenomenon that has been observed with the serum bromide levels in patients being treated for bromism. This rebound in serum bromide occurred in each of our patients and has been observed after treatment with hemodialysis¹⁰ and during the course of treatment with ethacrynic acid and mannitol.¹¹ It has been noted previously during the course of treatment with mercurial diuretics.¹³ It is postulated that movement of the bromide ion from intracellular compartments (neurons and erythrocytes) and from different extracellular compartments as a result of the concentration gradient created by the diuresis is the etiology of this phenomenon. The rebound in the serum, however, does not seem to grossly affect the clinical status of the patient.

Adjunctive Measures

From the nursing standpoint, our patients were treated as any patient with an organic brain syndrome (eg., reality orientation, involvement in the milieu, etc.). Fluids were pushed, but input and output were not recorded.

In our small sample, we were pleased with the results of even limited use of chlorpromazine in that it afforded our patients immediate relief from agitation and/or manic-like behavior and provided rapid relief (after only one day) from delusional thoughts and/or hallucinations in three of the four cases. One patient, at time of admission, was markedly delusional, had an intense pressure of speech and had to be restrained by several attendants. She was given 100 mg. of chlorpromazine intramuscularly and within one hour was quiet and cooperative and able to relate some pertinent history (eg., that she had been taking Nervine). No patient required more than three injections of 100 mg. each, administered at approximately 12-hour intervals, except for one patient who was found to have an underlying schizophrenia, undifferentiated type.

Electroconvulsive treatments have been ad-

ministered to the delirious bromide intoxicated patient, and E.C.T. is said to dramatically abort this behavior as well as facilitate the release of bromide from neurons.^{14,15} However, with vigorous use of one of the diuretics plus auxiliary medications, including chlorpromazine, E.C.T. can probably be avoided and will be unnecessary in the treatment of the vast majority of patients with bromism.

Summary

Four cases of bromism and their treatment with sodium chloride, ammonium chloride, a mercurial diuretic, and chlorpromazine were presented. In addition, 25 cases of bromide intoxication as reported in the literature were reviewed. The pathophysiology of bromide intoxication was critiqued and signs and symptoms of the poisoning were presented, stressing their protean nature and the resultant propensity to mimic various clinical entities, especially those of a "functional" disorder.

In light of the significant persistence of bromism, all physicians would be well advised to delegate the intoxication to a relevant place in his differential diagnoses, remember that it is an imitator of both organic and psychiatric illness which manifests itself in sundry signs and symptoms, and include in his history-taking questions asked of the patient and/or his family regarding the use of Nervine, Bromo-Seltzer, Nytol or other similar bromide medications. If the intoxication is not suspected, then chances are great it will not be diagnosed. A needless fatality could be the result.

Pharmacists should steadfastly refuse to market and dispense proprietary bromides thereby offering the consumer a greater measure of protection from considerable morbidity of this potentially lethal toxin. In this respect, it seems that the pharmacist stands first in the line of defense.

Furthermore, the Federal Drug Administration should assume its responsibility to protect the public from this preventable illness by disallowing over-the-counter sales of bromide-containing products.

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Syndrome of Streak Gonads and Normal Male Karyotype in Phenotypic Females

E. A. Espiner et al (Medical Unit, Princess Margaret Hosp, Christchurch, New Zealand)
New Eng J Med 283:6-10 (July 2) 1970

Five related phenotypic females, representing three different sibships in the same family, were found to have pure gonadal dysgenesis, which was confirmed by the finding of streak gonads at laparotomy in each case. Cytogenic studies in a number of different tissues showed a normal male (XY) karyotype in all affected members, none of whom had signs of Turner's syndrome. Hormone studies carried out in two of the five cases indicated negligible estrogen excretion and no gonadal response to the stimulus of human chorionic gonadotropin. No evidence of testicular differentiation was seen histologically in any of the streaks examined. Transmission of this disorder of testicular development by genes on the X-chromosomes or an autosome, as described in other genetic disorders of male development, is the most likely mode of inheritance.

Excessive Serum Insulin Response to Oral Glucose in Obesity and Mild Diabetes

R. Chiles and M. Tzagournis (Univ Hosp, Ohio State Univ, Columbus)
Diabetes 19:458-464 (June) 1970

Glucose tolerance tests and serum insulin levels were analyzed in 501 patients to determine the characteristic responses of obese diabetics and nondiabetics as compared to lean patients. Those with an abnormal glucose tolerance test were further subdivided into an "impaired glucose tolerance" group (fasting serum glucose below 130

mg/100 cc) or "severe diabetics" (fasting glucose over 130 mg/100 cc). Hyperinsulinism was found in obese nondiabetics. Both obese and lean patients with impaired glucose tolerance had significantly increased insulin levels compared to nondiabetics and frequently secretion was delayed. Severe diabetes was associated with absolute as well as relative deficiency of endogenous insulin. Although there is great individual variation of insulin secretion in response to oral glucose, obesity and mild glucose intolerance are associated with elevation of the serum insulin levels.

Regulation of Insulin Release by Pancreatic Glucagon

A. R. Colwell, Jr., and L. Zuckerman (Evanston Hosp, Evanston, Ill)
Diabetes 19:429-437 (June) 1970

Pancreatic and hepatic infusion of glucagon permitted comparison of the relative importance of hormone from both sources on immunoreactive insulin release. Intrapancreatic injection of 10 μ g provoked an immediate pulse of insulin of high amplitude in the portal venous blood. Intraportal and intravenous administration of the same amount caused less insulin secretion despite comparable hyperglycemia. Production of comparable insulin levels with appropriate amounts of glucose caused less hyperglycemia; in contrast to glucagon, glucose caused insulin secretion without hyperglycemia. Epinephrine blocked insulin release from glucose. Since the response to intraportal infusion was limited, it is doubtful that glucagon plays an important role in the insulin response to an oral glucose load.

Acupuncture**

Wen J. Chiu, M.D.*

Since reports of acupuncture practice in China by respected medical authorities in the United States, including Drs. E. Grey Diamond, Samuel Rosen, Paul Dudley White, in 1971, great interest and curiosity arose among the public and medical circles. Difficulty is encountered in studying the acupuncture in the United States, because most of the textbooks are in Chinese or other foreign languages. English literature on the subject is scarce. It is a completely different concept of the medicine and some diagnoses in the ancient Chinese medicine do not correspond well with the modern Western medicine.

BRIEF HISTORY OF THE ACUPUNCTURE

Acupuncture has been practiced in China for more than 4,000 years. The first written book appeared in Yellow Emperor's "Classic of Internal Medicine" or "Nei Ching," describing the philosophy of Chinese medicine, acupuncture, moxibustion, meridians, needle points, and principles of treatment. Throughout many centuries, many textbooks were written and poems for meridians and points to facilitate memorizing and study were also written. Besides 365 points and 12 meridians, many more were accumulated from experience and practice.

The downfall of acupuncture started in the middle of the 19th century by the invasion and influence of Western Culture. The Nationalist Government, in 1929, outlawed traditional medicine.

However, since establishment of the People's Republic of China (Red China) in 1949, acupuncture has come back strongly and combined with Western Medicine. A new era of acupuncture, employing acupuncture as surgical anesthesia, began in the mid 1950's and is still being developed and refined. By 1967, 21 colleges of the traditional medicine were established in China, having 70,000 students, offering a 6-year course of study to qualify as acupuncturist.

Outside of China, in Japan, it has been practiced for many years. Russia sent three women physicians to China in 1956 and three acupuncture institutes have been established in Moscow, Leningrad, and Gorki. France has es-

tablished an acupuncture department in five hospitals in Paris and over 1,000 acupuncturists are practicing. In Germany, the acupuncture society has 300 members and many Chinese textbooks have been translated. In England, Doctor Felix Mann, Cambridge educated physician, reported the result of acupuncture treatment in 1963 and since then he has treated over 1,200 illnesses and diseases.

ACUPUNCTURE POINTS AND MERIDIANS

What are acupuncture points and meridians?

1. Traditional points and meridians which are described in classic Chinese medical books may be used for a particular disease or condition, if one can match the diagnosis of the two schools.

2. One may choose spontaneous tender point or by pressure associated with the disease.

3. Sometimes one can discover a little nodule, like the fibrocytic rheumatic nodules, often present at the back of the neck, in the shoulder, or in the lumbar area and use them as an acupuncture point.

4. By finger examination one may find a strip of tense muscle within a group of muscles with a hard and indurated area or in a swollen discolored area.

5. A small area or point of low electrical impedance or low electrical resistance of the skin may be used as acupuncture points.

6. Doctor Kim Bong Han, in 1962, claimed that the traditional acupuncture points and meridians have a specific structure.¹

(a) "Bonghan Corpuscles" are found not only in the reticular layer of the skin but also in the deep layer of the connective tissue, in the vicinity of blood and lymphatic vessels and even in the area of internal organs. These are named "Surface" and deep layer "Bonghan Corpuscles." The corpuscles display characteristic bioelectrical activity. There are three types of electric waves, periodically alternating, unidirectional, and unattenuated.

(b) "Bonghan Ducts" run along the blood vessels, but outside of them and interconnected, he calls these "Bonghan ductus outside of the blood vessels," and the other type of ducts, he calls "Floating ducts" in the blood vessels and lymphatic vessels.

(c) "Bonghan Fluid" circulates in "Bonghan Corpuscles" and "Bonghan Ducts." This fluid

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circulation can be proved by radioactive means, using P_{32} isotopes together with autoradiography. The quantitative phosphorous analysis of the liquid in the system, proved the presence of desoxyribonucleic acid (DNA), in large quantity and ribonucleic acid (RNA), even though there is no cell but merely a large number of basophilic substances in the fluid. This is contrary to present thinking that DNA occurs only in the cell nucleus, whereas RNA appears only in the cytoplasm.

Kellner at the International Acupuncture Conference in Vienna and the German Acupuncture Conference in Wiesbaden, has shown that some of Kim Bong Han's theory is based on artifacts, occurring in the preparation of histological slides. Further investigation and confirmation or denial is necessary.

Several experiments to prove existence of the meridians and acupuncture points have been carried out by highly sensitive electro-potentiometers, which measure skin resistance, in China, the Soviet Union and Europe. These have recorded constant values along the meridians, but fluctuating value elsewhere. These experiments suggested that the points are located in the connective tissue and the connective tissue is looser in the vicinity of the points. Some of the investigators agree that the presence of the meridians and points is associated with sensitivity of the autonomic nervous system. It is well-known that many visceral, cardiovascular, glandular and endocrinological reflexes are associated with activity of the autonomic nervous system, so that some of the effect of acupuncture may be through this system.

POSSIBLE EXPLANATIONS OF THE MODE OF ACTION OF ACUPUNCTURE

A. Traditional Chinese theory has no scientific evidence to convince us except Kim Bong Han's theory which needs further confirmation and investigation.

B. Hypnosis, autosuggestion and cultural background may play some role, but evidence of successful acupuncture in rats, cats, dogs, and rabbits, by EEG pattern and lowering of induction voltage, tend to discredit this theory. Successful use of acupuncture anesthesia in the emergency room in treatment of every patient for severe fractures at the Third Teaching Hospital, Peking Medical College, is also against this theory.

C. Magnetic Theory — Some think that the meridians look like the lines of force around a magnet, and acupuncture induces electrical discharge of the condenser and intervenes the magnetic force.

D. Humoral Theory — Pinprick releases cortisone, or histamine or epinephrine, but this theory fails to explain the specific action of acupuncture.

E. Neural Theory is more likely the base of acupuncture —

1. Nerve reflexes.

(a) Pavlov's uncondition reflex.

(b) Viscero-cutaneous reflexes — Henry Head (1898), an English neurologist, discovered zones on the skin which became hypersensitive to pressure when an organ, connected by nerves to this skin region, was diseased. If the acupuncture needle is put directly into one of these tender or painful areas, a considerably smaller stimulation is needed to be effective.

(c) Cutaneo-Visceral Reflexes — Many animal experiments demonstrate that the stimulation of the skin causes the change in part of viscera which is innervated by the same segmental nerve.^{2,3,4} Patients with angina pectoris or acute myocardial infarction, the infiltration of procaine in the trigger area of the chest wall usually, provided complete and prolonged relief of the pain.⁵

(d) Viscero-Motor and Viscero-Visceral Reflexes — Stimulation of the viscera provokes muscle contraction in the appropriate dermatomes. Pricking of the abdominal wall within the distribution of the first lumbar nerve caused diminished urinary output.⁶ Crushing of testicles in the cat caused no movement of the ileum for four hours.⁷

(e) Dermatomes and Acupuncture Points — The majority of the above reflexes are segmental in nature. Some acupuncture points in different meridians, but in the same dermatome affect the same organ, which is innervated by the same spinal segment.

(f) Intersegmental reflexes and acupuncture points — The effect on the organ from a remote acupuncture point may be explained by Sherrington's long reflex or intersegmental reflexes. In the spinal dog, the stimulation of the saddle area caused rapid scratching movement in the ipsilateral hind leg and rigidity in the contralateral limb.⁸ In the decerebrated cat, stimula-

tion of the left ear causes flexion of the left fore and right hind limbs with increased extension of the others.⁸ There are other experiments showing that the stimulation jumped several segments causing the reflexes in the remote area.

2. Gate Theory (Malzack and Wall, 1965).⁹

Constant stimulations may jam up all the transmission mechanism in the thalamus or brain stem and further stimulation cannot reach the cerebral cortex.

Electrical inhibition of pain by stimulation of the dorsal column has been clinically tried.^{10, 11, 12}

A neurologic two-gate pain control system has been offered to explain acupuncture anesthesia by P. L. Man and C. H. Chen.¹³ Acupuncture needles produce a mild, steady stimulation of large peripheral fibers (A-beta fibers). When so stimulated, these large fast-conducting fibers carry non-pain impulses from the body to a "central gate" in the SUBSTANTIA GELATINOSA of the spinal cord. Impulses originating in the face or other area of the head are fed directly to a master gate in the thalamus which can also accept signals from the rest of the body. These non-pain signals saturate the gate so that the subsequent pain signals produced by surgery and transmitted by smaller, slow-conducting peripheral nerve fibers (C-fibers) cannot pass to the brain. The patient thus feels no pain.

3. Other evidence suggesting a neural mechanism¹⁴ includes:

(a) Procaine injection at acupuncture site or procaine infiltration widely around the puncture site did block the distant anesthetizing effects. (Dr. Chou Kuang-han, Peking Medical School).

(b) In cats, dogs, and rats, appropriately placed acupuncture could produce sleep and sleep pattern EEG (Dr. Chou Kuang-han).

(c) Acupuncture proved to lower cerebral induction voltage substantially in rabbits though painful stimulation continues. (Chou Chung-fo and Doctor Chao-ti, Faculty members of Peking Medical College).

(d) Morphological and histological studies of the ears showed groupings of vagus nerve endings in the pinna of the ear by myelin sheath staining, and when these endings were stimulated, changes were shown in the "electrical resistance" over abdomen. (Peking Medical College).

The use of acupuncture for the control of pain may be illustrated by the following two cases.

Case 1. D. J. M., 58-year-old female. The patient has had continuous excruciating pain in the right foot on any weight bearing or walking, with hyperesthesia of the skin to touch over lateral portion of middle third of the right foot, beginning in June, 1971. Exploration of the right common peroneal and deep peroneal nerves on February 28, 1972, wide excision of the scar of the right upper back for malignant melanoma on March 24, 1972 and posterior rhizotomy of L4, L5, and S1 on the right side on April 27, 1972, revealed all negative findings and no abnormal pathology.

In conjunction with the neurosurgical service, acupuncture was proposed and performed on August 9, 1972, using 4 needle points. Immediate and almost complete relief of pain was experienced, and was beyond our expectation. Patient got up and walked without pain for two weeks. The morning following this acupuncture, the patient cooked breakfast for her husband, the first time in six months.

Two additional acupuncture procedures were done two weeks and two months later for the return of about one-third of the previous pain.

Case 2. W. E. C., 63-year-old male. On November 22, 1972, this patient was seen for possible acupuncture treatment for burning pain in the sole of the right foot of about 32 months duration following accidental discharge of pistol, which injured the right calf and fractured the right femur on January 8, 1970, which was eventually fixed with pin and plate. Oats cell carcinoma of the right lung was discovered in July, 1972, he underwent right thoracotomy followed by radiation. The sciatic and posterior tibial nerves block by the neurosurgeon in July, 1972, did not relieve the pain.

The skin temperature of the right foot was much colder than the left. There was diminished pinprick over the entire dorsum of the right foot and over medial aspect of the right calf in comparison to the left. Hyperesthesia with production of disagreeable dysesthesia in the sole of the right foot was provoked by pinprick as well as by light touch.

Diagnostic sympathetic block on November 28, 1972 at L2, L3 on the right resulted in a marked rise of skin temperature of the right leg with only 30% of the pain relief and more comfort in flexion, extension and exercise of the right foot.

Acupuncture at 4 needle points on the right leg was performed with a neurosurgeon on November 29, 1972. The patient stated about 25% pain relief. Acupuncture at 2 points on December 19, 1972, provided 50% or more relief of the pain.

Acupuncture was repeated on January 17, 22, and 30, and February 6, 1973, and the pain of the right foot was improved.

The patient complained of much pain in the right thigh for two weeks. X-ray findings were negative. Acupuncture at 2 points, one of which was at a tendon nodule in the surgical scar of anterolateral aspect of the right thigh, resulted in 100% relief of the pain.

These two cases showed good pain relief even though it was not long lasting.

When acupuncture is used as surgical anesthesia, some of the advantages and disadvantages are as follows:

Advantages:

1. No interruption in hydration — patient can eat or drink even during the operation.
2. No post-operative nausea or vomiting.
3. No lowering of blood pressure.
4. Anesthetic effects persist post-operatively.
5. No post-operative pulmonary complication.
6. Simplify post-operative care — patient walks off operating table on his own power.
7. Simple equipments, convenient and readily available.

Disadvantages:

1. Not asleep — possible psychiatric trauma from memories of the operation, sight of surgical scene, of blood, etc.
2. Accidental puncture of blood vessels or damage to nerves.
3. Exact knowledge of acupuncture points is necessary.
4. Rather long induction time — about 20 minutes.
5. Not always successful — may have to be changed to conventional anesthesia, so still need trained anesthesiologist to stand by.

CONCLUSION

1. Our experience in pain control by acupuncture showed complete or partial relief.

2. It is a benign procedure, non-damaging, with less side effect compared to some other treatments.

3. Acupuncture is probably a useful remedy alone or in conjunction with other approved treatments for pain control, especially in pain of unknown etiology.

4. We shall try acupuncture as surgical anesthesia on selected cases.

5. We need accurate knowledge of the traditional acupuncture, clinical experience, scientific evaluation and experiment.

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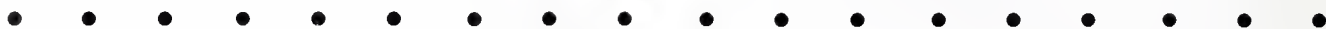
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ELECTROCARDIOGRAM

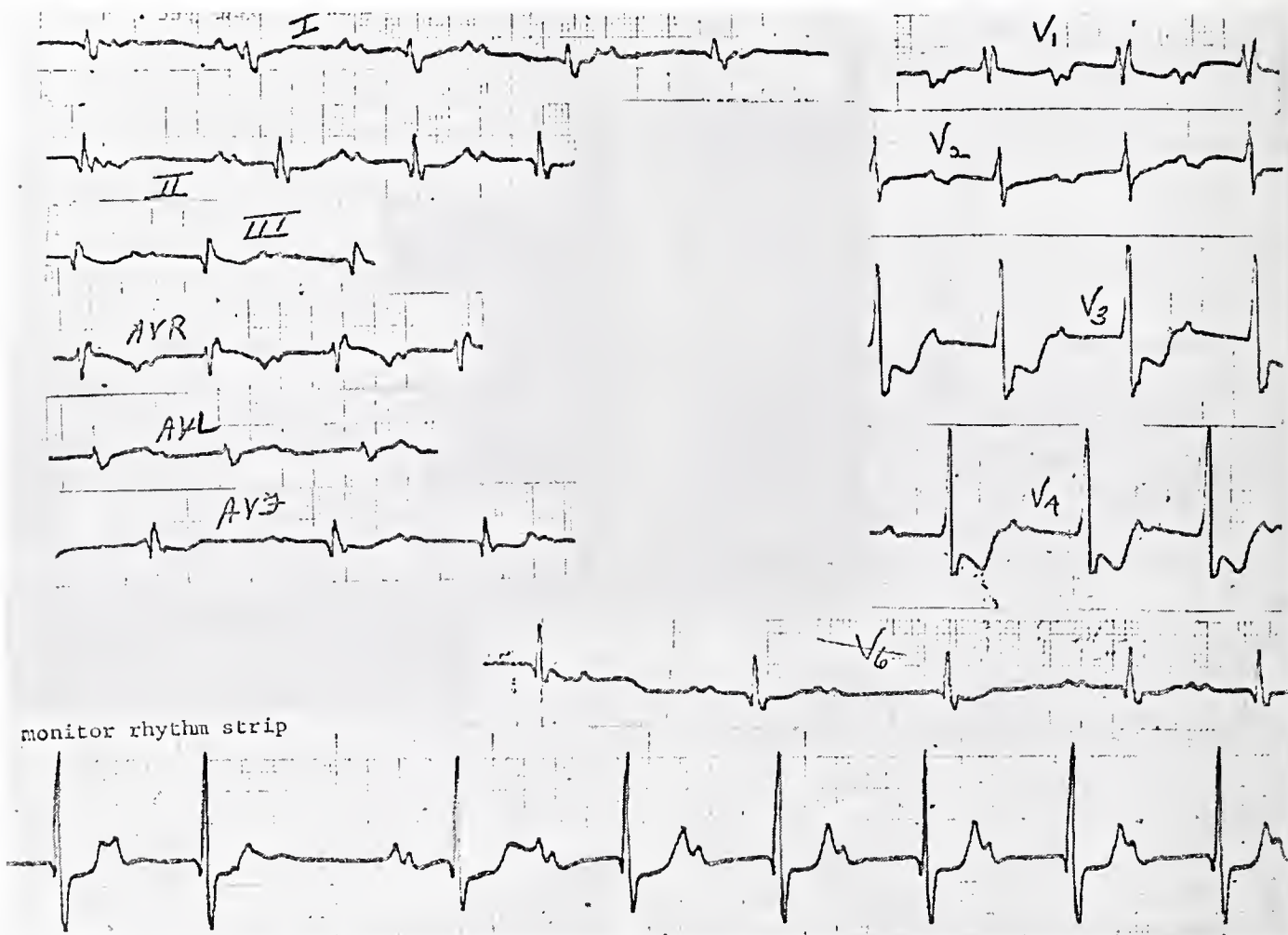


OF THE MONTH



The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 157)



62-year-old white male who had had a myocardial infarction 8 years before this tracing. For the past 8 months he has had episodic syncope.

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A Regulatory Program of Food Services

J. T. Jaynes*

The apparent trend of thought today in a continuing regulatory program to protect the consumer is directed toward the retail level which has been sorely neglected. We find that, comparatively, very few packages of food reach the retail level that are misbranded or adulterated, as such. However, the vigil must not be relaxed. Can we assure the consumer, who is the Number One person to be protected, that he is receiving what he thinks he is paying for, as did the distributor when he bought the item from the broker? Does he get butter when he orders buttered toast? Does he receive hamburger, a steak, a veal cutlet or a pork tenderloin, which have standards of identity established for the sole purpose of protecting the consumer, when he orders such from the menu? Or does he receive a prefabricated comminuted and reshaped item consisting of several substances one of which *may be* meat, but the majority of the lot include such extenders as textured vegetable proteins which is much cheaper than meat and absorbs 19% water that cannot be removed by cooking and the whole lot breaded and fried?

Does the consumer find on display at the market the quality or grade of meat that was advertised in the morning paper, or does he find grass fed beef instead of U. S. choice? Does he purchase his produce from display cases being illuminated with green lights or reflectors, or meat from areas being lighted with red or pink bulbs or reflectors whereby it is made to appear fresher than it is? When he buys a two ounce slice of ham for a sandwich, should he be expected to pay for two ounces of wrapping paper in a neighborhood store?

Does he receive clean safe food from the bargain counter of the local food store, or has such food been fished from the submerged wreckage

of an overturned truck or from the contents of wrecked refrigerator railroad cars having spun glass insulation strewn throughout the lot and has not been reconditioned?

These questions and many others, along with general sanitation problems in the food fields, serve to make one aware of the pressing need of additional regulatory programs as well as implementing those in effect if the consumer is to be assured of adequate protection.

Consumer education combined with the enactment of the Arkansas Uniform Food, Drug and Cosmetic Act are steps to assure the consumer that he is purchasing wholesome, unadulterated and properly represented products.

The Uniform Food, Drug and Cosmetic Act is probably the single most effective tool the Arkansas State Department of Health has to protect the consumer. It is patterned from and practically identical to the Federal Act, which is enforced by three Federal Agents stationed in Arkansas if the questionable product has moved interstate. We work very closely with these people on mutual problems.

This Act is divided into three units and carries a penalty of a misdemeanor, the first offense which is not to exceed a fine of \$500 nor more than one year's imprisonment or both. Subsequent offenses and convictions carry a mandatory fine of \$1,000 or a sentence equal to one year's imprisonment or both at the discretion of the court.

The units of the Uniform Act are:

1. Advertising
2. Adulteration
3. Labeling or Misbranding

There are many ramifications of each unit that will permit only a brief discussion of each as related to food.

Section 3 of the Act states in part that the following Acts are prohibited:

*Sanitarian Supervisor, Bureau of Consumer Protection Services, Division of Food Services, Arkansas State Department of Public Health, 4815 West Markham, Little Rock, Arkansas 72205.

(a) The manufacture, sale, or delivery, holding or offering for sale of any food that is adulterated or misbranded.

(b) The adulteration or misbranding of any food.

(c) The receipt in commerce of any food knowing it is to be adulterated or misbranded and the delivery or proffered delivery thereof for pay or otherwise.

(d) The dissemination of any false advertisement.

(e) The refusal to permit entry or inspection, or to permit the taking of a sample as authorized by Section 20.

(f) Knowingly the giving of a false guarantee.

(g) The removal or disposal of a detained or embargoed article in violation of Section 6.

(h) The adulteration, mutilation, destruction, obliteration, or removal of the whole or any part of the labeling of, or the doing of any other act with respect to a food, drug, device, or cosmetic, if such act is done while such article is held for sale and results in such article being misbranded.

Under Section 2, the Act defines "labeling" as all labels and other written, printed or graphic matter upon an article or any of its containers or wrappers or *accompanying* such article. Therefore a placard accompanying an article may be considered as labeling and must not be false or misleading in any particular.

Advertisement is defined as all representations disseminated in any manner or by any means other than by labeling for the purpose of inducing, or which are likely to induce, directly or indirectly, the purchase of food.

Adulteration and misbranding are further defined in detail in Sections 10 and 11 of the Act.

The most troublesome areas we have under adulteration is under Section 10 (a) (4) which states in part, that a food shall be deemed to be adulterated if it has been produced, prepared, packed or held under insanitary conditions whereby it *may* have been contaminated with filth or whereby it *may* have been rendered unwholesome or injurious to health and (b) (4) if any substance has been added thereto or mixed or packaged therewith so as to increase its bulk or weight, or reduce its quality or strength or make it appear better or of greater value than it is. As the addition of sulphates, nitrites or nitrates in meat. This part of the provisions were questionable by some as to whether light

rays could be considered as substances added when red or pink lights or reflectors were placed in the vicinity of red meats and green lights displayed above green produce to make them appear better or fresher than they were. This question led to the promulgation of Regulation 3.2 of the Regulations pertaining to the Act as related to deceptive lighting which prohibits such deception.

The proper labeling of foods as to not be misleading or deceptive has given the Health Department much concern in recent months. This phase would be of more concern to the market management and to those involved in salvage food merchandise, the latter of which is controlled by the Arkansas Food Salvage Act.

In brief a food shall be deemed to be misbranded:

(a) If its label is false or misleading in any particular.

(b) If it is offered for sale under the name of another food. This is most likely to occur in the sale of products for which Standards of Identity have been established by the Federal Agency or by the State Board of Health.

(c) The labeling must be prominent and informative.

(d) All foods in package form must be labeled with the following information.

(1) The common or usual name of the product.

(2) The list of ingredients in the descending order of prominence if it is not a standardized product with specific exemptions for ingredient listing.

(3) The name and address of the manufacturer, packer or distributor.

(4) Net contents.

Exemptions have been made relative to ingredient listing on some specific market products including repackaged sliced bologna where ingredients of various companies' food differ in proportion.

Special dietary foods have additional labeling requirements.

There will soon be a radical change in the labeling of common foods, if vitamins, minerals or other substances have been added, as well as labeling relative to nutritional values of foods which are being developed on the Federal level, and will be discussed here.

The Arkansas Food Salvage Act (Act 241 of

1963) is a relatively new law and one of the first of its kind in the nation. Its purpose is to regulate the reconditioning of distressed merchandise resulting from fires, floods, train and truck wrecks, wind storms or any other means by which foods may be contaminated or misbranded prior to being offered for sale.

A State Food Salvagers Permit is required for processing or handling such foods. This Act has been very effective not only in controlling the sale of our own questionable foods but has been a tool by which we have prevented Arkansas from being the dumping ground for such products from other States. Of the 83 permits that have been issued only two have been revoked for distributing violative products. (They were from out-of-state.) Some of our own have been brought into the central office for hearing to give reasons why their permits should not be suspended and why they should not be prosecuted.

Nine other states have patterned a similar law from the Arkansas Act.

The State Regulations Pertaining to Food Stores and Markets, as do all regulations pertaining to the various food industries, are concerned with building construction, lighting and ventilation, vermin control, fixtures, toilet facilities, lavatories, water supply, waste disposal, the source of foods, the storage and general handling of foods, vehicles for transporting foods and general sanitation.

Section XV of the regulations, as most all other regulations pertaining to food establishments, requires a set of building plans to be submitted to the State Department of Health to be reviewed prior to construction and Act 469 of 1965 requires a minimum fee of \$50.00 for reviewing each set of plans.

The Food Services Division of the State Health Department constantly strives to provide the local sanitarians throughout the state with current information on suspected foods which may be adulterated or misrepresented.

The consumer can be the best detectives we have by reporting suspected violations.



EDITORIAL

Hyperlidemia: The Coronary Problem

Alfred Kahn, Jr., M.D.

Evidence is amassing that elevated blood cholesterol and triglycerides are both capable of increasing the rush in human beings of having coronary artery disease. Three excellent related articles have been published by The Department of Internal Medicine of the University of Washington (Journal of Clinical Investigation, Vol. 52, page 1533, July, 1973).

The first article by Goldstein et al, related lipid levels to survivorship in cases of myocardial infarction. In this series, 500 cases who had

myocardial infarctions were compared to 950 controls; the size of this study lends great validity to the statistics. They found hyperlidemia in 31% of the survivors in the infarction group. They found that the highest incidence of hyperlidemia was in males below 40 years and in females below 50 years. Hypertriglyceridemia was noted three times as often in the myocardial infarction as hypercholesterolemia. The authors suggest that elevated triglycerides may be a very important guide in predicting which patient is

a likely candidate for coronary heart disease. Furthermore, elevated triglyceride levels were seen in association with obesity, hypertension, and diabetes mellitus to a definitely greater degree than were the cases with normal blood lipids and hypercholesterolemia.

In the second paper, Goldstein et al, studied the genetic relationships seen in 176 survivors of a myocardial infarction; 146 hyperlipidemic cases and 27 normolipidemic cases. Using studies of triglycerides and cholesterol, Goldstein and his colleagues found that relatives of these survivors of infarction fell into five different genetic disorders; they state that "three of these—familial hypercholesterolemia, familial hypertriglyceridemia, and familial combined hyperlipidemia—appeared to represent dominant expression of three different autosomal genes"; there were other lipid abnormalities found: polygenic hypercholesterolemia and sporadic hypertriglyceridemia.

Goldstein, in speculating on his results brings up the question—is early age group coronary disease due to a genetic factor and something characteristic of our current civilization as diet, stress, and lack of physical exercise.

The third paper in this series concerns itself with "The Evaluation of Lipoprotein Phenotypes of 156 Genetically Defined Survivors of Myocardial Infarction." They present a rather striking inference; namely, that a quantitative analysis of blood lipid level in the family of a case, who has had an infarction and is hyperlipidemic is more relevant than the so-called lipoprotein phenotype determination.

This is a provocative series of studies and shows beyond reasonable doubt the inter-relationship between elevated blood lipids and coronary heart disease, especially triglycerides; the genetic pattern here is also irrefutably shown.

Feed Back Phenomena in Medical Practice

Alfred Kahn, Jr., M.D.

An enlightened outlook by metropolitan centers can often produce real benefits in the surrounding area; the metropolitan area will ultimately benefit from the improvement in the outlying territory. The Arkansas Gazette, page 3, July 23, 1973, had an article entitled "Memphis Working to Share Industry With Nearby Areas." The article outlines the benefits of this diffusion of industry into nearby smaller communities and goes on to say that Memphis in return has found that it is a hub for many services.

There is a real lesson in this attitude for medicine in Arkansas which the Journal of the Arkansas Medical Society has supported for years. Namely, Little Rock, Pine Bluff, Fort Smith, Jonesboro, and other metropolitan areas should make every effort to support the practice of medicine in the smaller communities. This implies the support of the private physicians and the community hospitals; this requires good communications and good will in the handling of the patient to obtain the best medical care for him. It makes very good sense to hospitalize a man who can be adequately cared for in a community hospital to leave him in his community hospital, especially when a telephone consulta-

tion with a colleague in a medical complex or a specialty can give reassurance about some of the lesser troublesome aspects of the case. The patient benefits by the care of a personal physician who knows him quite aside from the financial saving. The bed in the metropolitan areas is thus saved for a sicker patient.

For the really sick patient, the metropolitan hospital bed is literally vital and should be readily available. This ready acceptance of the truly sick patient into a big specialty hospital unloads the private physician and private hospital from expending many man hours in a situation where hospital help is scarce and patient pressures are extreme at times.

The proper use of medical facilities is something like the military maintenance service with first echelon service, second echelon, and so on up the base supply area with each echelon able to do a little more time-consuming job than the preceding one. Our community hospitals are doing a fine job within the scope of their intended operation. The metropolitan hospital and physicians should consider ways in which they can support and help medical practice in the outlying areas of the state.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The HEW Department issued interim regulations to guide the new chronic kidney disease treatment benefit program which is estimated will cost \$250 million in the first year and could rise to \$1 billion a year in five years. The expansion of Medicare to cover costs of kidney dialysis and transplants for beneficiaries of all ages started July 1. Under interim rules, the number of facilities providing dialysis and transplants has been frozen at those now operating. The regulations also freeze reimbursement to a level of cost or charge representing an average of the charges during the previous year. Reimbursement for maintenance dialysis is limited to a "ceiling" set by the department (\$150 per dialysis) above which a justification would be required. All facilities must agree to the assignment method of reimbursement. Final regulations are due by the first of the year.

* * *

Sen. Wallace F. Bennett, ranking Republican on the Senate Finance Committee, won't run for re-election next year. The 74-year-old Republican from Utah has served four terms in the Senate. Replacing Bennett as top Republican on the powerful Finance Committee will be Sen. Carl Curtis (R., Nebr.). Bennett, one of the Senate's most influential conservatives, is author of the controversial Professional Standards Review Organization (PSRO) amendment to the Medicare-Medicaid bill of last year. He cited his age as a factor in his decision. "I can't deny the calendar." A few days earlier, Sen. Norris Cotton (R., N. H.) had announced he will not run again.

* * *

Malcolm C. Todd, M.D., a Long Beach, Calif., general surgeon, is the new president-elect of the American Medical Association. He was elected by the House of Delegates during AMA's annual convention.

The 60-year-old Dr. Todd will serve one year and take office as the Association's 129th president next June in Chicago.

Dr. Todd was born April 10, 1913 in Carlyle, Ill. He is a graduate of the University of Illinois

and Northwestern University Medical School.

An associate clinical professor of surgery at the University of California in Irvine, Dr. Todd is a fellow of the American College of Surgeons, International College of Surgeons, American College of Gastroenterology, and a diplomat of the American Board of Surgery.

Dr. Todd is a past president of the California Medical Association and has been a member of AMA's House of Delegates since 1959. He is chairman emeritus of AMA's Council on Health Manpower and a member of the National Advisory Committee on Health Manpower.

Dr. Todd is married to the former Ruth Holle Schlake of Chicago. They have one son, Malcolm Douglas Todd.

* * *

President Nixon cited "a spirit of partnership" with Congress as he signed a one-year extension of major Public Health Service programs. The extension had been strongly opposed by the Administration which wanted to eliminate five of the 12 programs and cut others.

The Chief Executive declared that the bill strikes "a reasonable compromise with the Administration," noting that it keeps the programs alive for only one year instead of the customary three. In adopting the bill by overwhelming votes, Congress expressed an intention to review the programs to determine if it agreed with the Administration's policy decisions.

The 12 programs involved and the money authorizations for the fiscal year that starts July 1 are:

— Health services research and demonstration (\$42.6 million); National health statistics (\$14.5 million); Public health training (\$23.3 million). Migrant health services (\$26.7 million); Comprehensive health planning (\$360.5 million); Medical libraries (\$8.4 million); Hospital construction (\$197.2 million); Allied health training (\$44.3 million); Regional medical programs (\$159 million); Family planning (\$118 million); Community mental health centers (\$234 million); Developmental disabilities (\$41.7 million).

The Administration had urged Congress to

eliminate or phase out the hospital construction or Hill-Burton program, public health training, allied health training, regional medical program (RMP) and community mental health centers.

In a statement released with the signing of the bill and two other measures, President Nixon said "while the authorization levels are higher than I believe desirable, they will not damage our over-all fiscal position if the Congress now follows my recommendations in the appropriations process.

"So long as the Congress follows a responsible course in the passage of future spending bills, I will cooperate in a spirit of partnership. But as we go forward let there be no mistake about one fundamental point: if bills come to my desk which are irresponsible and would break open the federal budget, forcing more inflation upon the American people, I will veto them."

The RMP program has already been disbanded at HEW headquarters. Apparently, some sort of a makeshift arrangement will have to be set up to keep it operating for one more year anyway.

There was only one vote in Congress—by Rep. Phillip Crane (R., Ill.) in either house of Congress against the extension bill, which made unlikely any successful veto.

The chief Administration argument for closing down the five programs was that they were inefficient, had outlived their usefulness, or could be handled more appropriately by the states.

* * *

The important national Professional Standards Review council has been established with the appointment of 11 physicians. The council will advise HEW Secretary Casper Weinberger on the Professional Standards Review Organizations (PSRO) program to monitor the quality of medical care in Medicare and Medicaid.

"The contribution of this council will be vital to the accomplishment of the objectives of the PSRO legislation, and we are indeed fortunate to be able to draw upon such a high caliber of expertise," Weinberger said.

Members of the council were selected from among 200 physicians of recognized standing and distinction in the appraisal of medical practice who were nominated by national organizations representing practicing physicians and by consumer groups and other health care interests.

Those appointed to serve a three-year term

on the council are:

Brown, Clement R., M.D., Director, Medical Education, Mercy Hospital and Medical Center, Chicago; Covell, Ruth M., M.D., Assistant to the Dean of School of Medicine, University of California at San Diego; Duval, Merlin K., M.D., Vice President for Health Sciences, University of Arizona, former Assistant HEW Secretary for Health; Greene, Thomas J., M.D., Surgeon, Detroit; Haggerty, Robert J., M.D., Professor of Pediatrics, University of Rochester, N. Y. School of Medicine and Dentistry; Harrington, Donald C., M.D., obstetrician-gynecologist and medical director, San Joaquin Foundation for Medical Care, Stockton, Calif.; Hunter, Robert B., M.D., family physician, Sedro Woolley, Wash., member of the board of the American Medical Association; Nelson, Alan R., M.D., internist, Salt Lake City, Utah, alternate delegate to AMA; Saloom, Raymond J., D.O., osteopathic physician, Harrisville, Penna.; Seward, Ernest W., M.D., Professor of Social Medicine, University of Rochester School of Medicine and Dentistry, Rochester, N. Y.; Scrivner, Willard C., M.D., obstetrician-gynecologist, Belleville, Ill., president of the Illinois State Medical Society and member of AMA committee on health care of the poor.

* * *

The Board of Trustees has appointed Robert H. Moser, M.D., the Chief Editor of the Journal of the American Medical Association effective October 1. At the same time Dr. Moser will become Director of the Division of Scientific Publications, which has editorial responsibility for JAMA and the AMA's ten specialty journals.

Hugh H. Hussey, M.D., who has held both positions since 1970, will remain a fulltime member of the staff as Editor Emeritus. He will also assume responsibilities for coordinating publication of the specialty journals.

A graduate of the Georgetown University School of Medicine, Dr. Moser, 50, currently practices internal medicine with the Maui Medical Group, Wailuku, Hawaii. Certified by the Board of Internal Medicine, Dr. Moser followed a career of medical officer in the U. S. Army, rising to the position of chief of medicine at Walter Reed General Hospital, Washington, D. C. He had an appointment to the clinical faculty at Georgetown, where he was active in teaching, research and the authorship of a number of original articles. Currently he is clinical professor of medicine at the University of Hawaii

and the University of Washington Colleges of Medicine.

With a background that includes teaching but emphasizes the day-to-day problems that confront an internist in private practice, Dr. Moser has a deep appreciation of the practical requirements a medical journal must meet. He has impressed the Board with his dedicated resolve both to continue JAMA's high standards of scientific excellence and, at the same time, to rededicate its purpose to serving the needs of the office-based practitioner.

* * *

The special use of drugs by young athletes is probably increasing in the same proportion as drug abuse is increasing among the general student population, the American Medical Association has told a Senate subcommittee.

Dr. Donald L. Cooper, team physician at Oklahoma State University and a member of an AMA committee concerned with the medical aspects of sports, noted before a subcommittee investigating juvenile delinquency that while there are no current surveys on drug abuse by young athletes, earlier studies show a direct correlation of use by athletes and the general student body.

The report of the National Commission on marijuana and drug abuse, Dr. Cooper pointed out, "indicates that drug abuse among the general student population has increased, and it is logical to expect that athletes as members of that subculture have also been influenced to abuse drugs more in recent years."

Emphasizing AMA's longtime stand that drugs and athletics don't mix, Dr. Cooper said that in his opinion drugs — amphetamines — do not enhance athletic performance, despite some conflicting reports in the literature as to possible minimal benefits.

"Some studies actually show impairment of certain skills," Dr. Cooper said, warning that there can also be substantial detrimental effects from continued amphetamine abuse.

Dr. Cooper pointed out that concerted efforts have been made by the athletic community to control abuse despite the incentive to use any method to improve performance, particularly in international competition.

However, Dr. Cooper cautioned against mass testing programs, such as the monitoring of urine, saying such programs throughout the nation for school and college athletes would be scientifically unreliable, expensive and time con-

suming.

* * *

Spokesmen for drug companies and physicians' groups have urged the Food and Drug Administration to delay guidelines on what cough and allergy prescription products may contain.

"These products have been used safely and successfully by physicians for decades," the American Medical Association told a FDA hearing. Asking no "precipitous action," the AMA said, "there is hardly a citizen who has not received some relief from bothersome symptoms via one or more of these products."

The proposed guidelines cover more than 200 of the most widely prescribed prescription cough and allergy medicines. Specific limitations would be placed on composition such as banning combinations of expectorants and antihistamines. Effect will be to bar continued marketing of many cough and allergy preparations.

John H. Budd, M.D., a member of the AMA Board of Trustees, said the interim guidelines would not serve the public interest. Dr. Budd noted that a FDA panel on over-the-counter drugs is reviewing the OTC situation. "It is apparent that the final monograph that emerges from this review process will have a substantial bearing on the formulation and labeling of prescription as well as OTC drugs . . . and in many respects will determine the related issues," said Dr. Budd.

The proposed interim guidelines were not formulated under the specific requirements of the drug law, he said, "but rather were devised on the basis of subjective judgments made by members of the appropriate drug efficacy study panels."

The AMA official said that if one considers the contribution any one drug may make to a mixture, published evidence as specified in the law does not exist for any of the classes of drugs in cough mixtures: antitussives, expectorants, antihistamines, decongestants, demulcents or flavorings.

The problem that confronts us is not a simple straightforward one such as determining the effect a drug has on bacterial multiplication, urine output or level of a plasma constituent. Rather we are in the difficult area of subjective human feelings, symptoms with profound psychological as well as physical parameters. The remedies for cough were developed by trial and error over decades and even hundreds of years. The long

history behind the expectorant ingredients . . . have put them, in the doses used, to the test of safety and by the impressions of clinicians to the test of effectiveness. How effective they are is difficult to measure since for cough the placebo effect is extremely important. Many coughs respond simply to a drink of water. Other coughs respond to expectorants. Still others respond only to substantial doses of codeine or an equivalent antitussive, and finally some coughs will yield to nothing yet devised."

* * *

REPORT OF AMA MEETING

June 24-28, 1973

New York, New York

*Purcell Smith, Jr., M.D., Delegate**

The AMA House of Delegates acted on a wide range of issues during the 122nd Annual Convention. The issues ranged from PSRO's and wage-price controls to institutional licensure and the need for more primary care physicians. The agenda was the largest in the Association's history.

Delegates selected Malcom C. Todd of Long Beach, California, as President-Elect. J. Frank Walker of Atlanta, Georgia, Speaker of the House, was not able to attend the meeting and submitted his resignation as Speaker due to recent illness. Tom E. Nesbitt of Tennessee was elected Speaker and William Y. Rial of Pennsylvania was elected Vice-Speaker. None of the Trustees had opposition.

Inaugural Address of Russell B. Roth, President of the AMA:

Dr. Roth pointed out that the profession has many societal obligations and responsibilities and that "the individual physician can do little about them on his own." Only through "the collective actions of organized physicians can these jobs be done," he said. He termed the AMA "the bastion of professionalism and the stronghold of responsible socioeconomic leadership." Dr. Roth cited numerous AMA activities designed to serve the public and the physician. One of these, he said, is the AMA defense that is turning back the drive for "a compulsory national medical care delivery law that would promise what could not be delivered, at a price we would be reluctant to pay, through a vast new administrative bureaucracy." The effective defense, he said, "has not happened by chance or through uncoordinated efforts. It has not been

done by splinter groups."

Final Report of Charles A. Hoffman, President of the AMA:

In his remarks, Dr. Hoffman called for longer, rather than shorter periods of medical education; said that the Kennedy-Griffiths health insurance bill would "nationalize," rather than "socialize" medicine since American medicine is already socialized; called for vigorous political action to preserve physician prerogatives under programs such as Professional Standards Review Organizations but warned of the danger of over-involvement in politics; and reaffirmed his opposition to the union movement in medicine.

Dr. Hoffman said that "quality can be no better than the education on which it is founded," and cited what he called a "paradox in medical education." "At the same time that we have insisted on continuing education for the physician in practice, we have condoned a reduced curriculum for the student in medical school, and this is a threat to quality of care." He called for a wide range of remedies, including more courses both in medicine and in the humanities, and the revival of the rotating internship in community hospitals. Teaching hospitals would then concentrate on specialized training, Dr. Hoffman said.

Discussing the Kennedy-Griffiths bill, Dr. Hoffman said that "the true danger of the Kennedy-Griffiths bill is nationalized health care with the complete and total takeover of the entire health care delivery system by the government."

Physicians and the Government:

1. *PSRO's:* Two reports from the Board of Trustees outlining successful AMA efforts in providing physician input into the drawing up of PSRO regulations by the government, and in other areas, were filed by the House. In addition, two resolutions bearing on PSRO's were adopted. One resolution, initiated by California and amended, reads as follows:

Resolved, That the Secretary of Health, Education and Welfare be informed that the only organization which can give qualified peer review for physicians services to the patient, physician, government and taxpayer are those composed of practicing physicians, whether these are state or local groups; and be it further

Resolved, That since many of these practicing physician groups are functioning successfully, with multiple approaches, as peer review or-

*4001 West Capitol, Little Rock, Arkansas 72205.

ganizations, the regulations be so written to authorize these existing peer groups to continue their review as PSRO's or as functioning units of PSRO's, thus partially alleviating the unnecessary and costly implementation of new agencies as PSRO's.

The second resolution adopted was a substitute in response to a number of resolutions introduced, ranging from those calling for the AMA to go on record in opposition to PSRO's, to one urging the Association to seek repeal of the law. The substitute resolution, which conforms to PSRO policy approved by the House at the 1972 Convention, reads:

Resolved, that although it is recognized that repeal or modification of PSRO legislation ultimately may be required to preserve high quality of patient care, the American Medical Association should oppose any facets of this current legislation which act to the deterioration of quality care, publicize such deleterious facets, and place highest priority on developing and pursuing appropriate amendments to preserve high quality of patient care.

2. *Wage-Price Controls*: Six resolutions were introduced protesting discrimination against physicians under the government's Economic Stabilization Program. The Reference Committee F pointed out that, "Although Phase III has officially ended, discrimination has not been corrected and there is no assurance that other discrimination will not arise in the future."

Accordingly, the following substitute resolution was adopted by the House:

Resolved, That the American Medical Association continue to work by all lawful and practicable means to assure nondiscriminatory treatment for physicians under present and future Economic Stabilization Programs.

3. *FDA Drug Regulations*: Six resolutions were introduced pertaining to FDA policies and regulations affecting the practice of medicine. The House adopted a substitute resolution which directs the AMA to, (1) Continue to protest proposed and current regulatory activities of the FDA which have the effect of restricting use of prescription drug to "official labeling"; (2) Study the possibility of proposed modifications to the Food, Drug and Cosmetic Act to correct current problems; (3) Continue to work closely with the FDA in the development of effective methods for evaluating drugs used primarily to alleviate subjective symptoms, or drugs

for which controlled clinical studies seem inappropriate; and, (4) In continuing to work closely with the FDA, make efforts to develop an effective system of communicating the views of practicing physicians and medical specialty societies when action is proposed that may result in removal of frequently prescribed drugs from the market.

4. *Physicians, Hospitals, and Medical Schools*: The House adopted Report H of the Board which calls for the AMA to oppose the extension of institutional licensure in lieu of individual professional licensure to physicians and nurses. The Quality Assurance Program of the American Hospital Association caused considerable discussion. Resolution 50 called for the AMA to express its reservations about the potential of QAP to bring lay control of peer review. The House adopted Report H of the Board of Trustees which discusses the reservations, recommends that AMA representatives meet with the AHA to offer its suggestions on the program, and recommends preliminary testing of QAP in a limited number of hospitals. It is emphasized that, "This report is informational and does not imply endorsement of the Quality Assurance Program by the AMA."

Lengthy debate centered on Resolution 104 from Illinois which protests unilateral changes in medical staff bylaws by hospital boards of trustees that usurp the prerogatives of hospital medical staffs. Similar situations were reported in Arizona and South Dakota. The House went on record against any proposal or arrangement between a hospital board of trustees and its medical staff that conflicts with the AMA principles of medical ethics. It also stated that "only physicians can practice medicine under the laws of the state, and in those areas which medical judgment and the evaluation of professional competence are involved, the hospital has a duty to rely upon the judgments and recommendations of the medical staff."

The House also approved a resolution calling for (1) Increased medical staff representation on hospital boards; (2) State and local medical society efforts to remove barriers to such representation; and (3) The Joint Commission on Accreditation of Hospitals to ascertain from its inspectors the effectiveness of communications between hospital governing boards and medical staffs.

The House approved Report Z of the Board

of Trustees which has important implications for the medical profession and for the public. The report, as amended by the House, also contains important recommendations encouraging at least 50% of all medical graduates to enter residency training in the primary care specialties, and providing for continuous monitoring and reassessment of this situation.

5. *Physicians and the Public:* Resolution 145, introduced by Texas, highlights the importance to the public of a universal emergency telephone number for obtaining emergency care and directs the AMA to support and collaborate in current efforts to set up No. 911 as the nationwide emergency telephone number. This was adopted.

The House adopted Report I of the Board of Trustees which encourages state medical societies to support amendments to the medical licensure laws to permit out-of-state physicians to practice temporarily in areas of medical need. Resolution 97 urges that funding for improved migrant health care be obtained from a national source, and that a program for the special training of migrant health care volunteers be developed by the AMA.

6. *Association and Internal Matters of the House:*

Delegates acted on several important proposals aimed at protecting the interest of the practicing physician, strengthening membership, improving the response of the Association to the constituency, and making the Association more responsive to the needs of members.

Unions: The House adopted Resolution 86 which reaffirms the tradition of the medical profession of not withholding medical services (withholding services is a practice of most unions), or performing any act interfering with public welfare. The House also approved Report F of the Board of Trustees which opposes unionism among self-employed physicians. The report also recognizes that physicians in employment situations need assistance and support, and encourages the Board of Trustees to maintain its interest and concern for these physicians.

Malpractice: The House took several actions in regard to medical malpractice, including approval of Report GG of the Board of Trustees which outlines the proposed formation of a Medical Liability Commission to represent

health care providers in dealing with medical malpractice problems.

Intern-Resident Membership on Councils: After considerable discussion, delegates adopted Report A of the Council on Constitution and By-Laws which will change the by-laws to provide a seat on the Council on Medical Service and the Council on Medical Education for a representative for resident-intern members of the AMA.

Separation of Business and Scientific Meetings: The House took a compromise position on Report E of the Council on Long-Range Planning and Development which called for, among other things, separation of House of Delegates' meetings and Scientific meetings; holding all meetings of the House in Chicago; and the selection of widely separated locations for scientific meetings. The House adopted Reference Committee F recommendation that a meeting of the Scientific Assembly be held each year in conjunction with the Annual convention, but that one or more additional meetings of the Scientific Assembly be held each year at times and places selected by the Board of Trustees on recommendations from the Council on Scientific Assembly.

Election and Terms of Service of Trustees: The House rejected proposals that election of trustees be on a geographic or regional basis, concurring with the Reference Committee on Constitution and By-Laws that the present system has achieved a fair degree of regional representation. The House instructed the Council on Constitution and By-Laws to prepare for the 1973 Clinical Meeting a measure that will allow the House to vote on whether trustees shall serve a maximum of two, three-year terms.

Membership Certification and Dues: The House took several actions to facilitate membership in the AMA. It amended the by-laws to provide that (1) Physicians become AMA members upon certification by the state society rather than upon receipt of dues by the AMA, (2) The AMA dues-delinquency date be changed from June 1 to April 30, (3) Payment of one year's past due dues for reinstatement of AMA members be eliminated, (4) The criteria for AMA dues exemption be consistent with that of state societies, (5) The AMA be permitted to bill directly for dues under certain circumstances. The House also called for development of a standard dues billing for the federation.

Councilors Present Trophies To Health Activity Winners

Councilors from six districts participated in the District 4-H O-Ramas which were held in various sections of the State during June and July. The following councilors attended the awards programs and presented trophies to the first place winners in the junior and senior divisions of the Health Activity: Dr. A. S. Koenig, Fort Smith; Dr. C. C. Long, Ozark; Dr. John H.

Moore, El Dorado; Dr. Paul Gray Batesville; Dr. Fred C. Inman, Jr., Carlisle and Dr. Morris M. Henry, Fayetteville.

For the second year, the Arkansas Medical Society has underwritten the trophy expense for each of the District O-Rama Health Contests as well as the State 4-H O-Rama Health Activity.



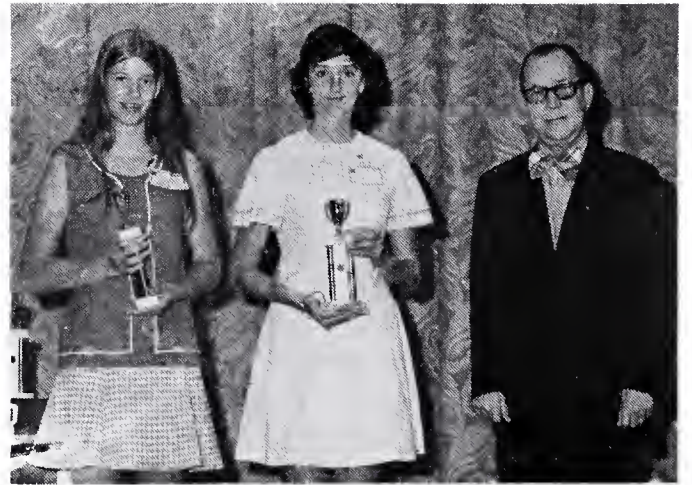
Flint Stites of Natural Dam, Dr. A. S. Koenig of Fort Smith, and Margaret Taylor of Scranton.



Dr. C. C. Long of Ozark, Trudy Pierce of Arkadelphia, and Dian Tothitt, Havana.



Catherine Hunter of Eagle Mills and Dr. John H. Moore of El Dorado.



Tammy Stark of Rose Bud, Linda Butler of Batesville, and Dr. Paul Gray of Batesville.



Stanley Lee of Holly Grove, Dr. Fred C. Inman, Jr., of Carlisle, and Cynthia Orlice of Des Arc.



Kathleen Taylor of Everston; Dr. Morris M. Henry of Fayetteville, and Sherry Fitzgerald of Springdale.

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 12:00 noon on Sunday, August 12, 1973, in the Sam Peck Hotel, Little Rock. Present were: Long, Wood, Saltzman, Shuffield, Farris, Duzan, Gray, J. Bell, P. Bell, Inman, Burge, Irwin, Jameson, Moore, Harris, McCrary, Orr, Henry, Kirby, Koenig, Norton, Brown, Hyatt, Watson, Wilkins, Alfred Kahn, Purcell Smith, Winston Shorey, Edgar Easley, George Mitchell, George Burton, Harry Hayes, Doty Murphy, Charles Silverblatt, Elois Field, R. N., Ethel Rosenfeld, R. N., Mr. Bob Shoptaw, Mr. Warren, Mr. Schaefer, Miss Richmond, and Mr. McIntosh.

New members of the Council and guests present were introduced by Chairman Long.

George Burton of Union County made a presentation of framed letters to Chairman Long and Mr. Schaefer. The letters from the Union County Medical Society disassociated the county society from a resolution presented at the 1973 Annual Session by a Union County member which praised the President of the United States for reducing expenditures in Federal medical programs. The letter called attention to several such programs in existence in Union County which are supported and encouraged by the Union County Medical Society.

The Council transacted business as follows:

1. Robert McCrary, Chairman of the Society's Committee on Liaison with the Nursing Profession, briefed the Council on his discussions with representatives of the Nurses Association. Elois Field and Ethel Rosenfeld, representatives of the Nurses Association, discussed the desirability of establishing a joint physician-nurse practice commission and the role of nurse practitioners. Upon the motion of Henry, the Council voted to set up a "Physician-Nurse Joint Practice Committee" in lieu of the present Society liaison committee. The committee is to be constituted of the members of the present liaison committee.

2. G. Doty Murphy, Director of the Division of Communicable Diseases of the State Department of Health, discussed an immunization project being conducted by the Health Department and volunteers the weekend of September 8-9. Upon the motion of Saltzman, the Council voted to go on record as supporting the action of the State Health Department and approving a letter by the Society president to advise the

membership of support of the project.

3. Edgar Easley of the State Health Department explained a Mobile Multiphasic Screening Examination Program for Elderly Persons in Arkansas which the Health Department, Health Systems Foundation and State Office on Aging propose to initiate. Upon motion of John Bell, the Council gave its approval to the proposed program.

4. Upon motion of Orr, the Council approved Executive Committee actions as follows:

- A. The Executive Committee voted to sanction a proposed polio-rubella immunization campaign planned by the Volunteers in Action if the State Health Department sponsored it.

- B. Agreed to change to September 23rd as the departure date for the Mediterranean Adventure.

- C. Requested that Mr. Schaefer maintain contact with Mr. Cooper of the Welfare Department to continue liaison with his department.

5. George Mitchell and Bob Shoptaw of Arkansas Blue Cross-Blue Shield discussed a "Hospital Utilization Project" which they plan to offer hospitals in the State. Upon motion of Koenig, the Council voted to endorse the project.

6. Harry Hayes, Chairman of the Insurance Committee, presented several items:

- A. A proposal from Aetna for a malpractice liability group plan for Society members. Upon motion by McCrary, the proposal was tabled.

- B. For the information of the Council, Dr. Hayes discussed (1) deferred compensation plans and (2) life insurance available to physicians whose practices are incorporated.

- C. Dr. Hayes discussed the possibility of the Insurance Committee undertaking a study of relative values. This was received for information.

7. A. Upon the motion of Orr, the Council approved the date of November 25, 1973, for the winter meeting of the Society.

- B. Mr. Schaefer presented a proposal for a luncheon program for the winter meeting as suggested by the Ark-Pac Chairman. Upon motion of McCrary, the Council approved the idea of presenting a panel consisting of county, State and National Government office holders.

8. Upon motion of Orr, the Council voted to request that the Executive Committee select two additional representatives for the Board of Directors of the Health Systems Foundation.

9. The Chairman presented a request from the AMA for endorsement of its revised Medi-credit proposal. Upon the motion of Saltzman, the Council voted to endorse the legislative proposal and to publicize its endorsement of the plan.

10. The Society president, Dr. Wood, presented several items:

A. He complimented Dr. McCrary on his work as chairman of the Liaison Committee with the Nursing Profession.

B. Dr. Wood advised the Council that the Auxiliary president, Mrs. Koenig, had requested Society endorsement of a State Juvenile Treatment Center. Upon motion of Henry, the Council voted to endorse the proposal for such a center.

C. Dr. Wood reported to the Council that approximately twenty-five names had been suggested to him as a member of the Search Committee for a Medical School Dean and that the committee has some excellent nominations for consideration.

D. He discussed a resolution proposed by Senator Moore of El Dorado for a feasibility study for a Department of Community Medicine at the University of Arkansas School of Medicine. Upon motion of Shuffield, the Council voted to defer action on the proposal until the November meeting.

11. Upon the motion of Orr, the Council voted to discontinue the Society's Health and Medical Manpower Commission which had been created in 1970.

12. The Council voted to hold the 1975 Annual Session of the Society at the Arlington Hotel in Hot Springs, April 21-23. Motion was by Koenig.

13. Mr. Schaefer discussed possible cost problems in connection with the annual banquet during the 1974 Annual Session and it was generally agreed by the Council that the Annual Session committee should feel free to consider locations other than the headquarters hotel for the annual banquet.

14. The Council approved, upon motion of Gray, a proposal that the Society's legal counsel join the National Health Lawyers Association.

The Council went into Executive Session for consideration of the following items of business:

1. The Council approved Executive Committee and Budget Committee action increasing the salary budget by \$3,400 for the year.

2. Dr. Saltzman tendered his resignation as a member of the Budget Committee and nominated Dr. Kenneth R. Duzan to succeed him. The nomination was seconded by McCrary and the Council elected Dr. Duzan.

3. Mr. Warren reported that he had been invited by representatives of the optometrists to meet with them.

APPROVED: C. C. Long, M.D.

Chairman of the Council



THINGS



TO

COME

"Long Weekend"

The September session of the Long Weekend continuing medical education program will be held on September 14 and 15, 1973 at the new Crown Center Hotel in Kansas City, Missouri. This program is acceptable for 13 prescribed hours by the American Academy of Family Physicians. For more information, write to University of Missouri — Kansas City, 2220 Holmes, Kansas City, Missouri 64108.

Cardiopathy of Aging II

A symposium entitled "Cardiopathy of Aging II" will be held in Little Rock, April 11-12, 1974. It is being sponsored by the Veterans Administration and the University of Arkansas. Additional information may be obtained from:

James E. Doherty, M.D.

Program Director

Cardiopathy of Aging II

300 E. Roosevelt Rd.

Little Rock, Arkansas 72206

Seminar on Cardiovascular Disease to be Held

The Symposia Medica Foundation, in cooperation with the Royal Society of Medicine, will present an international seminar on "Cardiovascular Disease" to be held in London, England, October 12-20, 1973. Registration fee is \$100.00. For further information contact: Cynthia Soika, M.A., Projects Director, Symposia Medica Foundation, 305 E. 24th Street, Suite 17-F, New York, New York 10010.

Conference on Practical Neurology and Psychiatry

A conference on "Practical Neurology and

Psychiatry" will be held October 13, 1973, at the Scott and White Memorial Hospital in Temple, Texas. The conference will present a practical approach to common office problems including cerebrovascular disease, headache, back pain, anxiety and depression. Recent advances in medical and surgical treatment of nervous disorders will be reviewed. Dr. Joe Foley, Department of Neurology, Western Reserve University; Dr. John Goodman, Department of Psychiatry, University of Texas Medical Branch, Galveston, and members of the medical staff of Scott and White Clinic will participate in case presentations, workshops and demonstrations. The conference is acceptable for Category I credit for the American Medical Association's Physician Recognition Award. Conference registrants may wish to purchase tickets to the University of Arkansas-Baylor University football game, Saturday evening in Waco (35 miles north of Temple). For further information contact: Department of Education, Scott and White Memorial Hospital, Temple, Texas 76501.

Course in Medical Genetics

A postgraduate course in medical genetics entitled "Genetics in *Your Practice of Medicine*" will be presented October 13 and 14, 1973, at Hodges Gardens Motor Inn and Restaurant, Many, Louisiana. The course is sponsored by the L.S.U. School of Medicine in Shreveport and has been organized by Richard C. Juberg, M.D., Ph.D., Director of the Birth Defects Center. Other faculty will include David A. Anderson, Ph.D., Section of Medical Genetics, University of Texas, M. D. Anderson Hospital and Tumor Institute, and Victoria L. Herzberg, Ph.D., Birth Defects Center, L.S.U. School of Medicine in Shreveport. Advance Registration must be made before September 29th. The fee for the course is \$25 and should be sent to Mr. Robert Graves, L.S.U. School of Medicine in Shreveport, P. O. Box 3932, Shreveport, Louisiana 71130.

Educational Seminar for Medical Assistants

The Arkansas State Medical Assistants Society will hold its Second Annual Statewide Educational Seminar on Friday and Saturday, October 13-14, 1973. Headquarters will be located at the Sheraton Inn in Little Rock.

The workshop seminar will cover a variety of subjects, including: diabetes, venereal disease, the drug scene—medically and socially, and a panel discussion on "What is a *Good Medical Assistant?*"

Physicians are asked to remind their Medical Assistants of the seminar and urge them to attend.

Course on Neuroradiology

A two-day course entitled "Introduction to Neuroradiology" will be held February 1-2, 1974. Although intended primarily for radiologists, neurologists and neurosurgeons, the presentations will be of value for any clinician dealing with neurological disease. For more information contact the Office of Continuing Medical Education for Physicians, University of Oklahoma College of Medicine, P. O. Box 26901, Oklahoma City, Oklahoma 73190.

Course on Emergency Care

A course entitled "Emergency Care and Transportation of the Sick and Injured," sponsored by the American Academy of Orthopaedic Surgeons Committee on Injuries, will be held October 18-20, 1973, at the Camelot Inn in Little Rock. The course will deal with cardiopulmonary resuscitation; shock; wound care; fractures and dislocations; head, chest and abdominal injuries; emergency childbirth; eye injuries and extrication. The course is designed for experienced ambulance attendants, firemen, policemen, emergency squads, volunteer rescue squads and emergency room nurses but it will also be open to others qualified for advanced training in emergency care. For more information contact Dr. Philip H. Johnson, 12th and Van Buren, Little Rock, Arkansas 72205.



RESOLUTIONS



Dr. Elisha Monroe Gray

WHEREAS, the members of the Baxter County Medical Society note with sincere sorrow the recent death of their colleague, Dr. Elisha Monroe Gray; and

WHEREAS, Dr. Gray had been its first president and an honored member of this Society for twenty-three years; and

WHEREAS, Dr. Gray's contribution to the medical care of the people of this area for such a long period of time is one of enviable record; and

WHEREAS, Dr. Gray's contribution as a good citizen of Baxter County, especially to the young people of the area, will long be remembered;

BE IT THEREFORE RESOLVED, that this resolution be made a part of the permanent records of the Society; and

THAT a copy of this resolution be forwarded

to the family of Dr. Gray as an expression of deepest sympathy; and

THAT a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

Adopted July 1973

Baxter County Medical Society



PERSONAL AND NEWS ITEMS

Dr. Robinson Presents Certificates

Dr. Guy U. Robinson presented certificates to the top graduates of the Emergency Medical Services course which was recently conducted in Dumas.

Dr. Morris Honored

Dr. W. Dale Morris was named the recipient of the Upjohn Resident of the Year Achievement Award at the University of Arkansas School of Medicine. Dr. Morris practiced in Searcy before beginning a residency in general surgery at the University.

Allergists Form Society

Allergists in Arkansas organized an Allergy Society on April 9, 1973. A formal name for the group has not yet been decided upon. The organization plans to take an active part in medical education as it relates to allergy. It also plans to act in an advisory capacity to state and national organizations regarding allergy practice, both professional and relating to economics.

Dr. Vida Gordon, Professor of the Department of Pediatrics at the University of Arkansas Medical Center, was selected to serve as the first president of and secretary-treasurer of the group.

Dr. Teeter Has Art Display

Dr. John A. Teeter of Little Rock had an art display at the Hot Spring County Library in Malvern during July and August. Dr. Teeter's color photography exhibit featured nature photographs and a study of his three young daughters.

New Doctors' Complex

Construction has begun on a new doctors' building to be located across from the Jefferson Hospital in Pine Bluff. The new complex will house eight doctors' offices built in two units of four offices, each facing the other with a patio separating the two units. Each office will con-

tain four examining rooms, a business office, a laboratory, a consultation room and a waiting room. Dr. Joseph S. Robinette will occupy one of the offices.

Dr. Henry Guest Speaker

Dr. Morriss M. Henry of Fayetteville spoke before the New England Ophthalmological Society in Boston, Massachusetts, on June 22nd. The society is made up of ophthalmologists in the New England area and meets with the Massachusetts Ear and Eye Infirmary alumni meeting. Approximately three hundred ophthalmologists were in attendance.

Member's Article Published

An article entitled "Renal Cell Carcinoma in a Horseshoe Kidney" by Dr. John F. Redman, *et al.*, appears in the August issue of the *Southern Medical Journal*.

Dr. Hall Honored

Dr. John A. Hall of Clinton was honored at a dinner given by the citizens of Clinton and the surrounding area in appreciation of his efforts to serve their medical needs.

Dr. Norton Guest Speaker

Dr. Joseph A. Norton, president of the Little Rock Rotary Club, spoke at the July 16th meeting of that club. Dr. Norton presented slides of his recent visit to Lausanne, Switzerland, for the Rotary International Convention.

Dr. Young Attends Course

Dr. J. Hosea Young of Wynne attended a course on Pediatric Infectious Diseases at Harvard Medical School in Boston, Massachusetts. The course, which was conducted in conjunction with the Harvard Children's Hospital Medical Center, dealt with recent advances in diagnosis and treatment of viral and bacterial infections, immunology, radiology and preventive medicine.

Speakers Bureau

The following physicians are participating in the Speakers Bureau of the Arkansas Medical Society and have filled speaking engagements: Dr. John D. Ashley of Newport presented a film entitled "Pulse of Life" at the August 1st meeting of the Augusta Rotary Club. Dr. H. Austin Grimes of Little Rock spoke to the Golden Chapter of American Business Women's Association in Little Rock. The title of Dr. Grimes' talk was "Home, There's No Place Like It — For Accidents".

Physicians Locate

Dr. James D. Russell and Dr. Terry G. Green are new staff members at the Dardanelle Clinic in Dardanelle.

Dr. Sam J. Scroggins is now associated with Drs. R. H. Langston and Joe Bill Wilson at the Family Doctors' Clinic in Harrison.

Dr. Tom Robinson and Dr. John D. Smith have joined Dr. Bob G. Banister in the practice of medicine at the Banister-Lieblong Professional Association in Conway.

Dr. Virgil Hayden has opened his office at 1706 West 42nd in Pine Bluff for the practice of obstetrics and gynecology.

Dr. Sumner R. Cullom has joined Drs. Eldon and Julian Fairley in the practice of medicine at the Fairley Clinic in Osceola.

Dr. Gene Speed has joined Drs. Thomas Wortham, Rex Moore, Ronald Fewell and Donald Raney in the practice of medicine at 813 Marshall Road in Jacksonville.

Dr. M. P. Hazzard, an orthopaedic surgeon, has opened his office at 912 West Vine Street in Paragould.

Dr. Dennis Fecher has joined the staff of Holt-Krock Clinic in Fort Smith. Dr. Fecher is a hematologist.

Dr. David Busby has joined the emergency room staff of St. Edward Mercy Hospital in Fort Smith.

Dr. James M. Sims has opened his office on Pershing Boulevard in North Little Rock for the practice of psychiatry.

Dr. Juan Sanchez has joined Dr. J. J. Magie in the practice of ophthalmology at the Magie Eye Clinic in Conway.

Dr. Robert H. Millwee, III, a urologist, has opened his office at 903 West Grand in Hot Springs.

Dr. J. David Martin has located in Yellville for the general practice of medicine.

Dr. Carlton L. Chambers, III, has opened his office in the Boone County Medical Center in Harrison for the practice of otolaryngology.



Dr. James Walter Long

Dr. James W. Long, a native of Greenville, South Carolina, is a new member of the Sebastian County Medical Society. Dr. Long received his pre-medical education at Tulane University, New Orleans, Louisiana, and then entered Louisiana State University School of Medicine, from which he was graduated in 1964. Dr. Long served in the United States Army from 1964 until 1967 and completed his internship at the Martin Army Hospital in Fort Benning, Georgia. His residency work in Orthopedics was at the Charity Hospital in New Orleans and the University of Texas Southwestern Medical School Affiliated Hospitals in Dallas, Texas. Since July 1972, Dr. Long has been associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith and specializes in Orthopedics.

Dr. John Keith Sigler

Dr. John K. Sigler is a new member of the Sebastian County Medical Society. Dr. Sigler is a native of Fort Smith, Arkansas. He attended Hendrix College in Conway, graduating in 1962. In 1966, he was graduated from Tulane University School of Medicine, New Orleans, Louisiana. His internship and residency work in Orthopedics was at Barnes Hospital in St. Louis, Missouri. Dr. Sigler served in the United States Army from 1967 until 1969. He is associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith, specializing in Orthopedics.

Dr. Charles Peyton Yarbrough

The Miller County Medical Society has recently added the name of Dr. Charles P. Yarbrough to its membership roll. A native of

Tyler, Texas, Dr. Yarbrough attended the University of Chicago and Texarkana College before graduating from the University of Arkansas School of Medicine in 1941. After completing his internship at the St. Louis City Hospital in St. Louis, Missouri, he served in the United States Navy from 1942 until 1946. He then re-

turned to the St. Louis City Hospital for his residency work in urology which he completed in 1950. For the past twenty-three years, Dr. Yarbrough has been in practice in Texarkana, Arkansas-Texas. His office is located at 1102 Main. He is Board Certified by the American Board of Urology.



OBITUARY

Dr. Jack N. Thicksten

Dr. Jack N. Thicksten of Alma died July 23, 1973. He was born on March 4, 1917, in St. Paul, Arkansas.

Dr. Thicksten received his M.D. degree from the University of Arkansas School of Medicine in 1951. From 1954 until his death, he was in practice in Alma.

He was a member of the American Medical Association, the Arkansas and Crawford County Medical Societies, and a Charter Fellow of the American Academy of Family Physicians. He was a member of the Alma Planning Commission, a member of the Board of Stewards of the Alma United Methodist Church, past president of the Lions Club, and vice president of the Fort Smith Chapter of the Air Force Association. After twenty years of service, Dr. Thicksten retired in June of this year as a colonel and commander of the 501st Medical Service flight at Little Rock Air Force Base.

Survivors include his widow, Mrs. Lorene Thicksten, two sons and one daughter.

Dr. Elisha Monroe Gray

Dr. Elisha M. Gray of Mountain Home died July 27, 1973. Born December 14, 1880, in Hickory Valley, Independence County, Arkansas, Dr. Gray was graduated from the Memphis Hospital Medical School in Memphis, Tennessee, in 1908. He practiced medicine at Evening Shade, Wynne, Floral, Lavaca and Mountain Home before his retirement approximately twenty-seven years ago.

Dr. Gray was a Life Member of the American Medical Association, the Arkansas Medical Society and the Baxter County Medical Society.

He served as the first president of the Baxter County Medical Society. He was a Mason, a member of the First United Methodist Church of Mountain Home and a member of the Rotary Club. Dr. Gray was presented the Silver Beaver Award, given for outstanding service to the Boy Scouts of America. He also established scholarship funds at Hendrix College in Conway and Philander Smith College in Little Rock.

Dr. Gray is survived by one son, Lyndell Norton, of Batesville.



ANSWER—Electrocardiogram of the Month

Atrial rate = 78/min.

Ventricular rate = variable — about 58 to 78.

PR interval = variable — very short to very long.

QRS interval = 0.12.

QT interval = about 0.40.

The QRS complexes are quite abnormal: they are prolonged with a terminal right, anterior, superior force suggesting right bundle branch block; they have an abnormal initial force — directed rightward, superiorly — indicative of loss of inferior and lateral wall forces (diaphragmatic and lateral wall infarction); and the QRS complexes are frequently totally unassociated with P waves. The P waves are also bizarre: their duration is too long — 0.14 sec or more — they have a pronounced double spike configuration, and they do not always drive the ventricles. Thus in lead I and most of V₆ there is A-V dissociation and a slow His bundle rhythm. When the atrium does capture the ventricle, it does so with a prolonged PR interval. Thus we have a high degree of second degree A-V block. In addition we have block in conduction through the atria — the prolonged notched P wave — and block in conduction through the ventricles — partial right bundle. The notched P wave might be mistaken for P mitrale, but its duration is really excessive, and the clinical situation does not support it. Intro-atrial conduction delay is not to be confused with atrio-dissociation, a rare entity where two separate P waves are being activated independently. Reference may be made to *CIRCULATION RESEARCH*, v. 18, 1966, p. 502.

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October, 1973

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 5. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

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Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

Abdominal Aortic Aneurysms: Surgical Considerations

G. Doyne Williams, M.D., David W. Bevans, M.D., Kerry L. Ozment, M.D.,
Virgil E. Lyons, Jr., M.D., Wayne B. Glenn, M.D., and William J. Flanigan, M.D.*

INTRODUCTION

Excision and aortic hemograph replacement of an abdominal aortic aneurysm was first reported by DuBost in 1951.³ Enthusiasm for the procedure supported both by a decreasing operative mortality and unfavorable prognostic reports of non-operated patients with aneurysms led to an era where the presence of an abdominal aortic aneurysm often sufficed as an indication for surgery.⁵ More recently, careful patient selection coupled with refinements in pre- and post-operative care as well as operative technique have significantly improved survival and served further to liberalize surgical indications.

The pendulum possibly has swung too far in favor of surgery and current surgical indications may deserve re-evaluation.² Many patients with small asymptomatic aneurysms have been shown to have a life expectancy not significantly different from their aneurysm free peers.^{7,10} Ideally, of course, one should like to reserve surgery for those patients whose aneurysms are destined to leak or rupture. This distinction can be difficult and the question will be enlarged in the discussion to follow.

CLINICAL MATERIAL

This report described 30 abdominal aortic aneurysms removed at the University of Arkansas Medical Center without mortality. Two other patients presented with small asymptomatic aneurysms measuring approximately 5 cm

in diameter during the period of time that these patients were seen, and surgery was not advised. The unoperated patients are followed regularly to detect changes that might appear in the size of their aneurysms. Details concerning the operative cases are included in Table I.

PATIENT SELECTION

The search for a common denominator identifying those patients with aneurysms most likely to experience leakage or rupture seems always to return to the size of the aneurysm on the initial examination. Patients with aneurysms larger than 7cm in diameter (as determined clinically on preoperative exam) have a 70% chance of death due to rupture of the aneurysm. Conversely, those patients with aneurysms below 7cm in diameter on initial examination have a 13% risk of death due to rupture of the aneurysm.² We also know that patients with abdominal aortic aneurysms and the recent onset of pain in the region of the aneurysm, or low back pain which they had not experienced in the past are likely to develop leakage or rupture of the aneurysm. The greatest risk of rupture is imposed upon patients with a painful and rapidly enlarging aneurysm on repeated clinical examination. Rarely a patient will present with an abdominal aortic aneurysm and acute complete aortic obstruction at the level of the aneurysm. This is due to disruption of the clotted material which often lines the interior of the aneurysm and its sudden downward displacement causing total ob-

TABLE I
Resected Abdominal Aortic Aneurysms 30 Cases

Oldest Patient: 83 Yrs.	Youngest Patient: 17 Yrs.	Average Patient Age: 66 Yrs.
Largest Aneurysm: 18cm in diameter		Operative Mortality: 0
Females: 7		Smallest Aneurysms: 7½cm in diameter
Straight Tube Dacron Graft: 10		Males: 23
Ruptured Aneurysms: 2		Bifurcation Graft: 20
		Intact Aneurysms: 28

*Departments of Surgery (Drs. Williams, Bevans, Ozment, Lyons), Anesthesiology (Dr. Glenn) and Medicine (Dr. Flanigan), University of Arkansas Medical Center, Little Rock, Arkansas 72205.

struction of the distal lumen. While rare in abdominal aortic aneurysms this occurs commonly in patients with popliteal artery aneurysms. We would recommend surgery in those patients with abdominal aortic aneurysms which are either symptomatic (pain), above 7cm in diameter, enlarging, or obstructive.⁴

PREPARATION OF THE PATIENT FOR SURGERY

Renal, cardiac, and pulmonary problems constitute the major source of morbidity and mortality following abdominal aortic aneurysm resection and have received major attention in this series of patients.

RENAL CONSIDERATIONS

Serum chemistries, creatinine, blood urea nitrogen, and an intravenous pyelogram are obtained on every patient in which resection of an abdominal aortic aneurysm is contemplated. Elevated blood urea nitrogen and serum creatinine even in the well hydrated patient do not in themselves preclude surgery as some degree of renal dysfunction may be present in almost every patient of the age in which abdominal aortic aneurysms are seen. Rather this finding serves to emphasize the necessity for additional protection of the kidney during and after surgery since even minor insults would be poorly tolerated.

The intravenous pyelogram should be reviewed for difference in size of the two kidneys, unilaterally decreased or delayed function, and ureteral obstruction. Unilaterally decreased or delayed function and/or a small kidney requires evaluation for impaired arterial supply to that kidney either by involvement of the renal artery in the aneurysm or isolated obstruction disease of that renal artery. Bilateral renal arteriograms will most readily define the problem, and are best performed by insertion of a cardiac catheter through the left brachial artery with positioning of the tip of the catheter just above the renal arteries. A retrograde aortogram obtained by percutaneous femoral insertion of the catheter by the Seldinger technique is hazardous, in our opinion, because atherosclerotic material may be dislodged from the interior of the aneurysm and embolize peripherally.

Should a renal artery be totally occluded by the aneurysm and fail to visualize, and if non function of this kidney is further confirmed on IVP, one should remove the kidney at the time of resection of the aneurysm. A renal artery which is found to be only partly obstructed by the

aneurysm can be divided at the time of aneurysmectomy and subsequently anastomosed to the dacron graft. Isolated stenotic lesions of the renal arteries are best treated (in our opinion) by individual vein bypass grafts originating either from the aorta or from the dacron graft used to replace the aneurysm. All of these techniques have been incorporated successfully.

Hyponatremia, dehydration, and shock either singly or in combination have been shown experimentally and clinically to produce impaired renal function ranging from mild to irreversible acute tubular necrosis. Unfortunately, this combination of abnormalities is all too easily experienced in the patient undergoing aneurysm surgery. Characteristically, the candidate for aneurysmectomy is an older individual whose already diminished food and water intake is further decreased by apprehension on the day prior to surgery, and he is also held N.P.O. on the evening prior to surgery. These patients have often been on specific therapy to reduce the body sodium for cardiac or hypertensive problems. This dehydrated and hyponatremia patient is then taken to surgery, his blood pressure is initially reduced by anesthetics, further diminished by varying degrees of exsanguination, briefly increased by the application of a cross clamp on the aorta below the renal arteries during resection of the aneurysm and finally may be abruptly dropped to shock levels by the rapid removal of this clamp. Even healthy kidneys may not survive this insult and while many patients may experience only a transient rise in BUN and serum potassium with decreased urine output for several days post-operatively, others may develop irreversible acute tubular necrosis which is almost invariably fatal in this age group of patients.^{6,8}

We have placed major emphasis on preventing these complications. A Foley catheter and a percutaneous subclavian catheter for central venous pressure monitoring are installed on the evening prior to surgery. Hydration is started 18 hours prior to the contemplated time of surgery and commonly consists of 1,000cc's dextrose 5% in water plus 40mEq of potassium chloride in the first six hours, 1,000cc's of dextrose 5% in normal saline plus 40mEq of potassium chloride in the second six hours and 1,000cc's of dextrose 5% alcohol 5% in the final six hours prior to surgery. The exact volume will vary depending on the size of the patient and his state of cardiac com-

pensation. The water load establishes a brisk diuresis averaging 75-100cc's per hour, the sodium helps maintain intravascular volume and serves to subdue the renin-angiotensin system in the kidney, and the 5% alcohol helps maintain the increased diuresis. Prior to induction, a plastic needle is inserted percutaneously into the left radial artery and the blood pressure displayed by means of a strain gauge on an oscilloscope. The urinary drainage system is placed in view of the anesthesiologist and permits a minute by minute assessment of urinary output.

The aneurysmectomy proceeds in the usual manner and the blood loss, central venous pressure and urinary output are reviewed just prior to contemplated removal of the aortic cross clamp. Deficits in blood replacements are corrected and if the central venous pressure is considerably lower than that recorded at the start of the procedure additional blood and fluid are given. The patient should have a steady output of urine at this time and if not, an additional 12½ grams of manitol are given intravenously. Twenty milligrams of Lasix may be given intravenously to the resistant patient. These precautions will produce a rapidly diuresing kidney which is more resistant to damage from rapid changes in blood pressure. The aortic cross clamp is then slowly released while the oscilloscopic display of the blood pressure is constantly in view of the operator. Usually very little change in the mean aortic pressure is seen when the clamp is slowly released in the well hydrated and blood replaced situation. However, should a fall of greater than 10mm of mercury occur with the first releasing of the clamp, the clamp can be gently approximated for a few seconds until the pressure returns to a normal mean and then slowly released again. This can be repeated slowly several times until volume adjustments between the upper and lower portions of the body have occurred. The mean aortic pressure did not vary more than 10mm of mercury in any patient in this series. The period of de-clamping of the aorta represents to us the point at which the patient undergoing aneurysm surgery is at his greatest risk and may easily be the time of acute renal failure, acute myocardial infarction or a cerebral vascular accident.

Renal protection extends well into the post-operative period and is achieved by maintaining a copious diuresis in the first 24 hours, facilitated

by the recording of hourly urine output and use of additional fluid and/or manitol as necessary to maintain diuresis of at least 50cc's per hour. Patients undergoing resections of large aortic abdominal aneurysms may lose a considerable volume of fluid in the large area of dissection required for removal of the aneurysm and consequently may require a larger volume of fluids post-operatively.

CARDIAC CONSIDERATIONS

Many adult patients with abdominal aortic aneurysms have experienced cardiac problems prior to discovery of the aneurysm. Here again the history of an infarction, angina, or cardiac arrhythmias does not preclude surgery but sensitizes the physician to employ additional cardiac safeguards.

The patient with angina and/or history of a previous myocardial infarction must not be subjected to lowering of the mean aortic blood pressure as impaired perfusion of the coronary circulation has already been proven. The same precautions as described for renal protection suffice here. The patient must be well hydrated prior to induction of the anesthetic and blood and fluid replaced to full volume prior to manipulation of the aortic cross clamp. Fifty percent of the patients in this series had a previous myocardial infarction and no patient had a clinical experience or electrocardiographic changes suggestive of a myocardial infarction during or after the resection of an aneurysm.

Cardiac arrhythmias deserve special consideration. Many patients have been on diuretic therapy when evaluated for aneurysm surgery. Even though their serum potassium may be normal, we know that the patient on chronic diuretic therapy commonly will have reduced his total body potassium (which is usually 3,000mEq) by fifty percent.⁹ The intracellular potassium will be low even though the serum potassium may appear normal. The damaged myocardium tolerates lower intracellular potassium very poorly as any arrhythmic tendency is enhanced. We prefer to begin preparation of the aneurysm patient receiving diuretics at least 5-7 days prior to the contemplated surgical procedure. Non-essential diuretics are discontinued and oral potassium supplementation is given. Patients with degrees of cardiac decompensation or hypertension such that abrupt withdrawal of the diuretics would be hazardous are hospitalized, diuretics

are decreased as much as possible, and again enforced oral supplementation of potassium is provided. Water, salt, and alcohol loading are done as previously described on the evening prior to surgery. Forty milliequivalent of potassium are added to each six hour IV and the cardiac monitor is carefully watched during the surgical procedure for the appearance of arrhythmia's.

Controversy continues to surround the prophylactic use of digitalis prior to major surgical procedures. This precaution has been suggested to avoid the post-operative complication of a sudden supraventricular tachycardia. We would continue digitalis in any patient previously digitalized and we prophylactically digitalize most older patients. Obviously the introduction of digitalis imposes a greater risk of arrhythmia if the patient should become hypokalemic during or after the procedure, so even greater attention to potassium determinations and supplementation is observed. Should an arrhythmia develop in spite of all of these precautions specific therapy for that arrhythmia (including DC countershock if necessary) is immediately instituted and the patient is followed with constant electrocardiographic monitoring.

PULMONARY CONSIDERATIONS

Recent advances in blood gas determinations, evaluation of pulmonary function by precise spirometry, and volume cycled mechanical ventilators which can be used for extended periods of time have all but obviated poor pulmonary function as a contraindication to surgery. All patients being considered for aneurysm surgery have blood gasses drawn while breathing ambient air and also undergo spirometry. Here again impaired blood gasses and poor respiratory function are not looked upon as absolute contraindications to surgery but rather as a means of identifying those patients who will need ventilatory support during and after surgery. Smokers are encouraged to discontinue the use of tobacco at least one week prior to surgery. They are also instructed in deep breathing and coughing exercises to be used at home for one week prior to surgery. Patients expected to require post-operative ventilatory support are instructed in the use of ventilators and practice breathing on a ventilator with a face mask prior to surgery. The patients are intubated by the nasal route at surgery and we have found the nasally introduced endotracheal tube can be comfortably tolerated

by a patient for several days post-operatively. Impaired mechanical ventilation caused by "fighting" the ventilator is overcome by an attempt to "capture" the patient's respirations by increasing the ventilator rate. Failure of this maneuver is followed by giving the patient sufficient morphine and curare to allow adequate mechanical ventilation. Usually, even the more compromised patients can be removed from the ventilator in 24-48 hours.

SURGICAL TECHNIQUE

Patients are placed upon the operating table so that the entire abdomen and both groins are exposed. The midline incision extends from the xyphoid to the pubis. The abdominal contents are reflected upward and to the right providing exposure of the aneurysm which is then further revealed by incision of the peritoneum lying inferior to the base of the small bowel mesentery. The third portion of the duodenum is reflected and one tries to immediately identify the left renal vein which commonly lies anterior to the renal arteries at this level. Identification of this vein is imperative as in an occasional patient the vein will lie posterior to the aorta and serious and even fatal bleeding has occurred as a result of dissecting bluntly around the neck of the aneurysm. Proximal control of the aneurysm is obtained by encircling the neck of the aneurysm beneath the renal arteries with a cord tape and distal control is obtained by encircling the iliac vessels in a similar manner. If the aneurysm feels free posteriorly and is not too tightly adherent to the vena cava, I prefer to dissect it away from the vena cava, individually ligate the lumbar vessels, and remove the entire aneurysm as a unit. Larger aneurysms which are intimately adherent to the vena cava and to the spinal column posteriorly are most expeditiously treated by removal of the anterior surface of the aneurysm and placement of a dacron graft in the bed of the remaining aneurysm.

A dacron graft of appropriate size is chosen and 50cc's of blood withdrawn from the aneurysm for pre-clotting of the graft. The aortic cross clamp is positioned and 25mg of heparin injected into the lumen of the aneurysm as the aorta cross clamp is applied so as to provide a small amount of heparin in the now static lower extremity vessels. The upper portion of the graft is sewn to the distal aorta with continuous sutures of 2-0 suture material utilizing a sturdy

vascular needle with cutting characteristics. Teflon felt buttresses are frequently used to support this suture line. The distal anastomosis is then made to the aorta, to the common iliac vessels if the aneurysm involved the origin of these vessels, or to the common femoral arteries in the groin if the iliac arteries are unacceptable for grafting. When the anastomosis to one limb of a bifurcation graft is completed the contralateral limb of the graft is individually clamped and an attempt is made to declamp the aorta with all of the precautions mentioned in the renal section. The other limb of the graft is then anastomosed to its appropriate artery and the clamp removed with care while the blood pressure is watched so that the rapid flow of blood into the remaining limb does not severely depress the aortic mean pressure. The anastomoses are completely wrapped with a strip of dacron cloth or with scraps of graft material. (Figure 1) Complete wrapping of these anastomoses may help prevent false aneurysm formation and may be particularly helpful on the upper anastomosis (which often lies directly behind the duodenum) in preventing aorticoduodenal fistula. The strips which wrap the anastomoses are held in place with sutures of 2-0 dacron. The abdomen is usually closed with interrupted monofilament stainless steel wire in a modified Tom Jones manner.

CASE REPORTS REPRESENTING SPECIFIC PROBLEMS

Abdominal Aortic Aneurysm With Angina, Suspected Renovascular Hypertension And Severe Pulmonary Emphysema

This 66 year old white male had noted an enlarging mass in his abdomen for approximately five months with pain in the region of the mass going through to the back.

Past history revealed three myocardial infarctions in the past five years and angina on exertion. He was receiving digoxin 0.375mg per day for cardiac decompensation. The patient was hypertensive with blood pressures averaging 200-220mm of mercury systolic over 100-120mm diastolic. He was receiving diuretics for cardiac decompensation and had been on a variety of antihypertensive medications with modest effect.

The electrocardiograms showed evidence of an old posterolateral myocardial infarction. The chest film revealed a moderately enlarged heart with markedly tortuous aorta and lung findings consistent with pulmonary emphysema. The

BUN on admission was 21 and had been 41 in the past on a clinic visit. Pulmonary functions revealed a forced expiratory volume of 2.8 liters, a one second forced expiratory volume of 1.3 liters, and a MMF of 0.3. A rapid sequence intravenous pyelogram showed non-function of a small left kidney and normal function of a normal sized right kidney.

An arteriogram for renal artery visualization was obtained (Figure 2) which revealed a normal

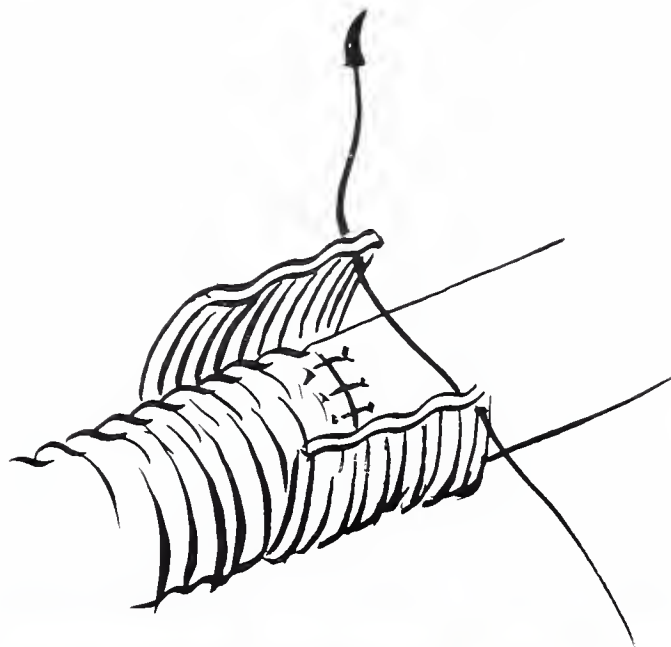


Figure 1
Method of suture line reinforcement with dacron graft strip.

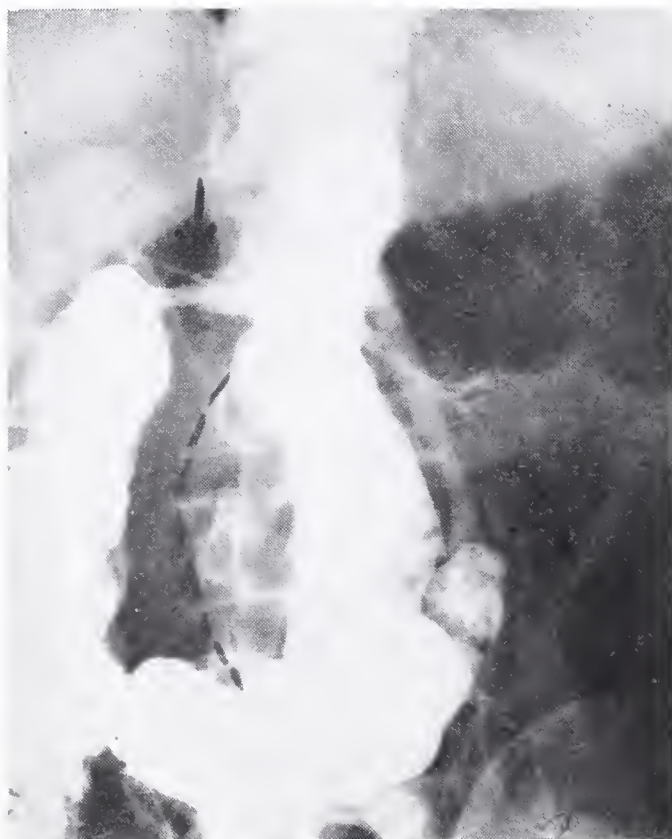


Figure 2
Arteriogram showing non-visualization of left renal artery. (See text.)

right renal artery (arrow) with good visualization of the right kidney but total absence of the left renal artery. The aneurysm itself hardly shows on this arteriogram due to clotted material in the aneurysm cavity which assumes a lumen similar to that of the normal aorta and makes visualization of aneurysm by arteriography very unreliable. The thin calcific right border of the aneurysm is emphasized by the dotted line. The colon contains barium from a previous cardiac series of x-rays.

This patient's aneurysm was enlarging and painful and rupture represented a major threat to life. The surgical removal of the aneurysm was recommended and accepted by the patient in the face of the increased operative risk. The patient was prepared for surgery according to the foregoing protocol receiving intravenous fluids and additional potassium on the evening prior to surgery and he was instructed in the use of post-operative ventilation.

At surgery a large abdominal aortic aneurysm was encountered (Figure 3) which arose immediately beneath the right renal artery but involved and totally occluded the left renal artery. The left kidney was found to be very small and atrophic although on surface inspection it did appear viable. An aortic cross clamp was care-

fully placed so as to exclude the left renal artery and allow patency of the right renal artery during resection of the aneurysm. The aneurysm along with the occluded left renal artery and left kidney was removed and a bifurcation graft was sewn to the aorta in the manner shown in Figure 4. The small portion of the aneurysm which protruded just beneath the right renal artery was noted to be a type of false aneurysm such that the normal aorta could be approximated with sutures buttressed with teflon felt pledgets without compromising the right renal artery. (Figure 4.)

Post-operatively the patient maintained a urine output in excess of 50cc per hour. He was supported with continuous volume cycled ventilation for 24 hours with a nasal endotracheal tube. The patient is now approximately one year post-operative and requires only digitalis 0.25mg per day and hydrochlorothiazide 50mg per day for control of his cardiac condition and hypertension. We concluded that the ischemic left kidney was contributing to the arterial hypertension in a Goldblatt manner.

Enlarging Abdominal Aortic Aneurysm With Additional Intra Abdominal Pathology

This 76 year old white female had two prior colon resections for carcinoma 9 and 11½ years

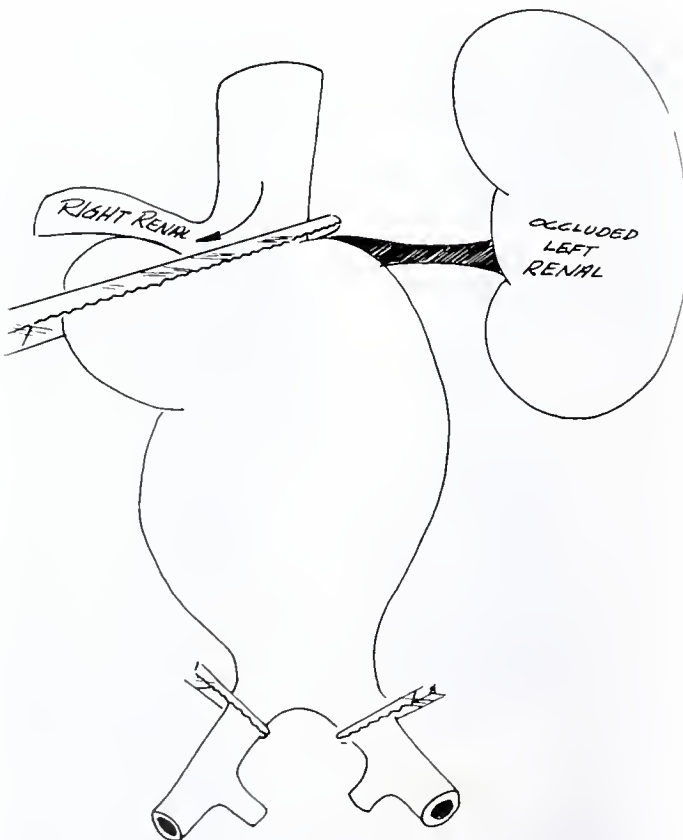


Figure 3
Technique of aortic cross-clamping with excision of left kidney. (See text.)

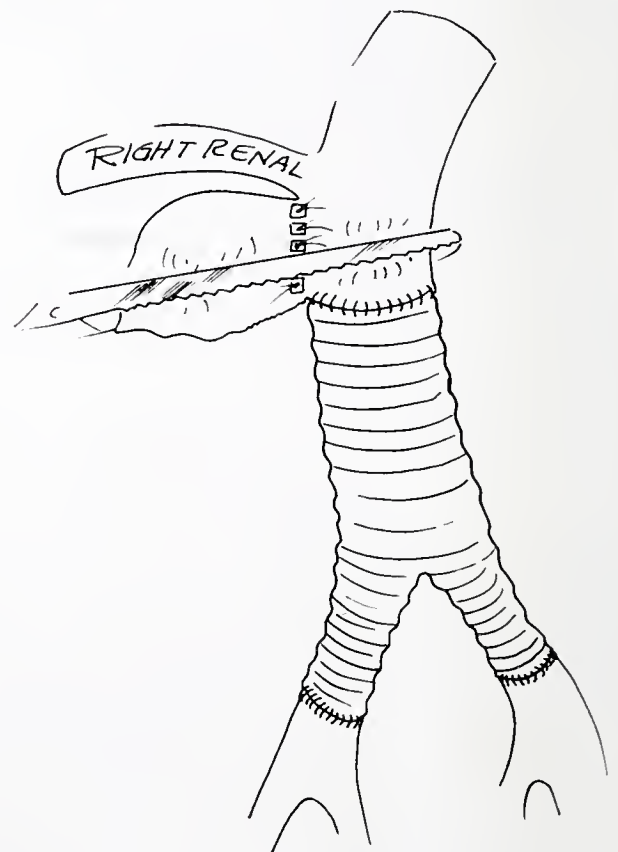


Figure 4
Technique of graft placement with preservation of right renal artery. (See text.)

prior to admission. The patient had a documented myocardial infarction six years prior to this admission and was taking digitalis, hydrochlorothiazide, and occasional sublingual nitroglycerin. She noted obstipation and blood streaked mucous in her stools one month prior to admission. Repeat barium enema showed a suspicious "napkin ring" lesion in the mid-transverse colon at the location of her most recent colon carcinoma operation. The patient also had a very easily palpable 10cm in diameter abdominal aortic aneurysm which was painful to palpation and was interpreted by the patient to be the source of a new type of pain which went through to the back at the level of the umbilicus.

The referring physician, who had examined the patient frequently in the preceding six months, reported that the aneurysm was enlarging in size. We felt that the most immediate threat to life was presented by the aneurysm and the patient was explored and a 7x10cm abdominal aortic aneurysm resected and replaced with a dacron bifurcation graft. A very firm lesion was palpated in the mid-transverse colon at the region of the previous colon resection and was interpreted by palpation to be a suture line recurrence of the tumor. There was no evidence of projection through the serosa of the bowel at this point and no evidence of obstruction.

The patient underwent an uneventful recovery and six weeks later the transverse colon lesion was excised using a very wide V-excision of the omentum, most of the mid-transverse colon and the mesentery. Several small lymph nodes at the point of this resection were negative and subsequent pathological evaluation of the lesion revealed this to be a very limited suture line recurrence of the tumor. The patient is living and well three years following the second operation and repeat barium enemas at yearly intervals have revealed no further pathology.

The colon lesion was not molested at the time of resection of the abdominal aortic aneurysm for fear of contamination of the dacron graft. Since the aneurysm appeared to be the most immediate threat to life it was managed first and the colon problem managed as a staged and controlled procedure.

Abdominal Aortic Aneurysm In A 17-Year-Old Girl

This 17 year old white female was referred for a pulsatile 7x10cm upper abdominal mass. Past

history revealed that the patient had an aneurysm of the left brachial artery resected and replaced with a vein graft in Houston, Texas, five years prior to this admission. A pathological interpretation of the aneurysm removed at that time was not available and hospital records for that procedure did not indicate any workup directed toward the cause of this unusual finding in a young person. The patient had recently married and was judged to be approximately two months pregnant at the time of this examination.

Due to the unusual nature of the aneurysm an abdominal aortogram was obtained (Figure 5) which revealed a large and almost saccular abdominal aortic aneurysm arising just below the renal arteries with another area of aneurysmal enlargement of the anterior left lateral aorta immediately below. No other aneurysms in the aorta, renal arteries, or distal arteries were seen.

The patient was suspected of having a connective tissue disorder possibly a variant of the Ehlers-Danlos syndrome and was evaluated by a geneticist who suggested that examination of the portion of the normal aorta which would be removed at the time of resection of the aneurysm might be revealing.

The patient was also evaluated by the Ob-Gyn department who confirmed the presence of a two



Figure 5
Aortogram of 17-year-old patient with Ehlers-Danlos syndrome.

month pregnancy but felt that the large, enlarging and pulsatile aortic aneurysm precluded term delivery and felt that resection of the aneurysm should be undertaken even though abortion might occur.

At laparotomy a 7x10cm aneurysm was found arising just below the renal arteries with a second aneurysm arising from the aorta immediately above the bifurcation. These were resected as a single unit and the defect replaced with a dacron bifurcation graft. Subsequent examination of the "normal" portion of aorta above the aneurysm revealed marked diminution in the numbers of collagen fibers and the patient was identified as a mitis variant of the Ehlers-Danlos syndrome manifested by cardiovascular defects.

Spontaneous abortion did not follow the surgical procedure. However, review of the pertinent literature revealed that female patients with this particular type of Ehlers-Danlos syndrome may rupture their uterus near term and 50% of their offspring will have the Ehlers-Danlos syndrome so that interruption of this pregnancy and sterilization of the patient was recommended.¹ Dilation, curettage and subsequent tubal ligation was carried out. This patient is currently being seen at six month intervals with careful evaluation for recurrent aneurysms.

Enlarging Abdominal Aortic Aneurysm With Recent Myocardial Infarction

This 63 year old white male presented with a painful and enlarging abdominal aortic aneurysm. On the day of admission for surgical evaluation he developed severe chest pain and subsequently developed electrocardiographic and enzyme changes consistent with myocardial infarction. Hypotension and arrhythmias followed the infarction and required two weeks of intensive therapy on the coronary care ward prior to achieving any degree of stabilization. He was subsequently treated with digitalis, anti-arrhythmic agents, diuretics and absolute rest. As his condition stabilized, he was treated for an additional month in the same manner at home and was re-admitted to the hospital six weeks following infarction for reconsideration for surgery.

The previously outlined cardiac precautions were observed and the patient's aneurysm was resected without incident and with little change in aortic mean blood pressure during the procedure. He was taken to the coronary intensive care ward post-operatively and shortly on arrival

to the ward developed a supraventricular tachycardia with ventricular response in the 160-180 range. This was intermittent at first and during these episodes the mean blood pressure dropped from 90mm of mercury to 60-65mm of mercury. Intravenous digitalis did not slow the ventricular response and it was not felt that this lowered mean aortic pressure would be long tolerated. The patient was being ventilated with a volume cycle ventilator by means of a nasal endotracheal tube and the arterial PaO_2 had been in excess of 125mm of mercury at all times during and following surgery so hypoxia could not be incriminated. Accordingly the patient was given a single direct current countershock and the tachycardia immediately converted to a sinus mechanism at a rate of 90 per minute. The patient had no further complications and was allowed to return home nine days following the surgical procedure. He has remained well.

Abdominal Aortic Aneurysm With Aberrant Left Renal Vein

This 65 year old white male had a large abdominal aortic aneurysm and a past history of two myocardial infarctions. The patient was prepared for surgery in the previously described manner and induction and midline laparotomy were started without incident. The small bowel mesentery was reflected upward and to the right and the duodenum was identified at the base of the mesentery as it crossed the upper portion of a large aneurysm. The duodenum was retracted cephalad and search was begun for the left renal vein which could not be found anterior to the aneurysm. Dissection was then cautiously carried out on the right and left sides of the aorta just above the neck of the aneurysm and both renal arteries were identified. Further dissection beneath the left renal artery and the left posterior aspect of the neck of the aneurysm revealed the left renal vein to be beneath the aorta. Dissection was then carried down the right side of the neck of the aneurysm to expose the vena cava and careful dissection behind the aneurysm revealed the left renal vein to arise from a bifid vena cava which joined exactly at the neck of the aneurysm to become a single vena cava at the point of junction with the left renal vein. The venous structures were quite densely adherent to the posterior aspect of the aneurysm. Some mobility was gained by dissecting down the right and left sides of the aneurysm until the aneurysm could

be rotated gently from side to side. Then the aneurysm was retracted to the right and all lumbar vessels were identified posteriorly, clamped and ligated. This allowed enough movement of the aneurysm to permit careful sharp and blunt dissection of the left renal vein away from the posterior aspect of the neck of the aneurysm which was then encircled with a dacron tape in preparation for cross clamping. The remainder of the aneurysmectomy proceeded without incident and was replaced with a dacron bifurcation graft.

This patient had very sclerotic iliac vessels which, however, had adequate luminal diameter. The dacron tape snare incorporating a short length of rubber tubing in the snare was used to prevent damage to the vessel. The short length of tubing is placed on a soft portion of the vessel and the snare approximates the contralateral wall of the vessel to the tubing with little danger of fragmentation of a calcific vessel wall as might occur with a vascular clamp. (Figure 6)

This case emphasizes the necessity for an orderly approach to the anatomy at the neck of an aneurysm. Most surgeons identify the duodenum and the left renal vein and then gently dissect bluntly and sharply behind the aorta for

encirclement with a dacron tape. Should the left renal vein not be properly identified and this type of dissection carried out, serious and what has in some cases proved to be fatal hemorrhage may ensue from the left renal vein and vena cava.

CONCLUSIONS

Patients with abdominal aortic aneurysms often present with extenuating problems related to the lungs, heart, kidneys or combinations of the three. Surgical resection of the aneurysm can usually safely be carried out provided careful pre-operative evaluation has been done in order to provide the proper intraoperative and post-operative support for the organ systems most likely to fail. The surgeon should be prepared in advance to handle any vascular anomaly that may arise including renal artery revascularization. Ventilatory support of the volume cycled type and blood gas monitoring should be available. Continuous electrocardiographic monitoring should be available post-operatively for those patients developing cardiac arrhythmias.

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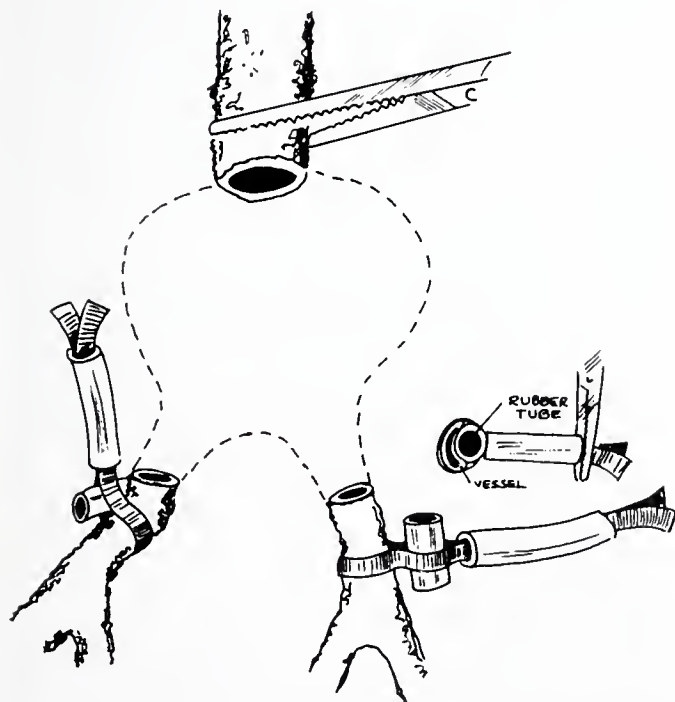


Figure 6

Technique of sclerotic vessel occlusion with snare incorporating a short length of rubber tubing.

The Obligation to Marry

Norma H. Conroy, M.D.*

The following six cases reveal similarities pertinent to the social conditioning of females with respect to their attitudes concerning sex developed during childhood, which later created conflict in the marital and family situation. In effect, these are traditional attitudes, mores, and habits communicated nonverbally and unconsciously, and transferred from generation to generation.

All of these observations have to do with difficulties encountered by females in their attempts to fulfill personal needs, family expectations, and remain within the confines of socially acceptable patterns of behavior.

These cases represent the multifaceted and complicated interweaving of all aspects encountered in the therapeutic situation, dealing with the unhappiness and frustration of females who felt the obligation to marry based on premarital sexual intercourse.

In the usual course of therapy, directed toward perusal of early interpersonal relationships, a repeated pattern of self-hatred and worthlessness was noted, having to do with the social, cultural, and moral conditioning of the female, and a conflicting mother-daughter relationship resulting in a maladaptive marital situation. All patients presented depressive symptomatology of unexpressed hostility, feelings of hopelessness and entrapment in the marriage, with a history of initial premarital sex with the spouse to be.

These women complained of inability to cope with depression manifested by excessive feelings of hostility toward the spouse, overt hostility, either verbal and/or physical abuse toward the children, with feelings that they would or could harm the children in some way. Initially they had no insight as to the cause of their emotional difficulty, nor had they made any connection between their attitudes toward sex, the initial sexual encounter and their present problems. However, with one exception, none were resistant to the unfolding as it became apparent that their guilt feelings had to do with rejection of the marital role as one of obligation, passiveness, and the social pressure to conform, regardless of

personal satisfaction. Each had a history of premarital sex with the spouse to be, a first-time sexual encounter, with excessive guilt feelings and the absolutely accepted conclusion that, because of their participation, they were obligated to marry that particular man in an effort to "make it right". They expressed feelings of inability to be themselves, yet few had made any effort to seek personal fulfillment in other areas, seemingly accepting the routine care of the children and household duties as part of their obligation and punishment for their "bad" behavior.

All reported difficulty in sexual adjustment after marriage, being accused of frigidity by their husbands, regardless of the fact that prior to marriage their husbands voiced no complaint or felt that it would "work out", as if to say that they had accepted and expected their brides to be reluctant, inexperienced, and resistant to sexual intercourse.

They had accepted the role of the frigid female, claiming disinterest and distaste for sex, combined with a worthless opinion of themselves as females, and accusing the husband of brutality and excessive sexual demands. They blamed their husbands for taking advantage of them at the time of the initial sexual encounter, and expressed conflictual feelings of personally wanting to resist, but feeling that socially it was a necessary measure to insure themselves of obtaining a husband.

Further exploration of the early development revealed deep-seated resentment of their mothers for not preparing them for the sexual role, setting up negative attitudes toward men (all men are beasts), refusing to discuss sex with them, failure to protect them by encouraging early dating before they felt they were ready, or overpermissiveness, forcing them to become, in effect, their own authority figures.

All of these women had underlying basic opinions that they should never have been born, that their mothers preferred other siblings to them and that they did not deserve any satisfaction in life. They were preoccupied with thoughts of early death and all had contemplated suicide at one time or another. Two had made suicidal gestures.

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They saw their husbands as victorious in the marital relationship because of their sex, but described their husbands as being weak, mean, vicious, uncaring, selfish, and demanding personally, but presenting a facade of competence and a "great guy" to society. None felt that their husbands really loved them, seeing themselves as conveniences only. In this respect they seemed to identify their husbands with their mothers, seeing their fathers as passive, uncomplaining and long-suffering, much as they saw themselves.

Conjoint therapy with the husbands revealed an attitude of "what more does she want?" Each male voiced anger and surprise that his wife had felt violated at the time of the initial sexual intercourse, claiming that the wife had evidenced equal interest and participation, which the wife then angrily and quickly disavowed.

Interviews with the offspring revealed an awareness of the parents' conflict and an attitude of hopelessness, excessive anxiety, responsibility for the situation, or generalized withdrawal. It was interesting to note that they were all marking time until they were old enough to get out of the family situation and all of the girls vowed that they would never marry. None of the children saw their mothers as unhappy, but rather selfish, hateful, and mean. Some were overtly hostile toward the mother and sided with the father, a "poor daddy" attitude. Others felt hated by the mother and felt unable to cope except by withdrawal or elopement.

J.E.

This 30-year-old housewife had previously been seen by a psychiatrist who had requested the husband's participation causing the husband to become angry and demanding that she change therapists.

Her chief complaint was frigidity and depression in spite of being financially secure, having four young sons, and a husband who felt that he had given her everything.

It was explained to the husband at the onset of therapy that his participation would be required and helpful in unraveling the marital difficulty. When the situation was presented to him as being helpful to his wife he acquiesced.

The patient was the younger of two girls and had always been acutely aware of her sister's use of her as a means of avoiding punishment. Her sister was set up as an example which she was to follow, but no matter how hard she tried her

efforts were never rewarded and her complaint of not being recognized as an individual carried over into her marriage.

The patient had dated her husband at college, and although she admired his aggressive quality, she never felt that she loved him but considered him to be a "catch". After her acquiescence to his sexual advances she felt obligated to marry him even though she did not respond to him sexually. The husband was aware of this, but felt on the basis of his past experience, which he divulged to be multiple and varied, that he would be able to overcome her resistance. He described his honeymoon as a nightmare, and recited his constant work throughout the marriage to bring his wife to climax, efforts which rather than improving the situation caused her to feel used, abused, and increased her hostility toward him.

The patient had never related well with her mother, feeling that the mother preferred her older sister and that she herself was supposed to have been a boy. Her mother would believe anything the older sister told her, and frequently punished the patient for unjust accusations made by the sister, accepting whatever the sister told as the absolute truth. The patient acknowledges that her sister really is perfect, gets along with everybody, can do anything, and so forth. The patient latched on to friends in grade school and high school, but something always came up causing her to feel betrayed. This betrayal scene emerged frequently in the course of therapy. The patient's relationship with her husband revealed a continuance of this pattern. At parties he is proud to show her off, but abandons her at the onset and flirts with other women, makes disparaging remarks about her lack of sexual ability, and calls her frigid. He gets angry and tells her that she makes a fool of herself at parties if she seems to be having a good time. The husband is not aware of his hostile attitude toward her, as her lack of response reflects on his own sexual prowess. He admits to loving her madly, but cannot accept the idea of the "unattainable female" in his own dynamics.

This couple has four male children whom the husband feels are sissies because his wife wants them to love art and music. She is very sensitive and has attached herself to the oldest son as a fulfillment, seeing him as a responsive male who appreciates other things besides business, making

money, and hunting trips. The husband demands that she have the children out of the way when he gets home, which she feels is unfair as she has had to deal with them all day and would like for him to take over. Although they make trips together with the children, she does not get away for any vacation alone, whereas he goes on weekend hunting trips with his business associates whenever he wants to. She sees her husband as demanding and insensitive to her needs, stating that he really never gives her a chance to respond because he is so intent on forcing a reaction from her. Her feelings about her marriage and her ability to perform sexually are rather hopeless. She accepts her role of the frigid wife, stating that she cannot have everything, and seemingly is willing to trade her marital unhappiness for the security her husband is able to provide. However, she is also fearful that she may some day meet a man to whom she can relate warmly, but again to whom she could not give fulfillment because of her obligation to her children.

J.P.

This 34-year-old housewife has made a suicide attempt by taking an overdose of medication after being informed by a previous psychiatrist that she was uncooperative and could not benefit from therapy. Subsequent to the death of her youngest child she had become severely depressed and had received a series of 20 ECT without benefit, remaining withdrawn, unmotivated, unable to perform her usual household chores, and totally disinterested in her other two children. The patient chose to dwell on her feeling of loss due to her child's death which she attributed to carelessness on the part of the physician. She also blamed God whom she said she could never trust again and had refused to go back to church.

The patient was extremely resistant to therapy which continued over a period of two years during which time she took an adult education course, completing her GED for her high school and entering LPN training which she did not complete.

This patient had been an only child, very spoiled, very willful, but shy and withdrawn. The patient's father had always been an invalid and she felt that her birth had prevented her mother from taking care of the father as much as she would have liked to. The patient stated

that she always felt like she was unwanted, in the way, and an extra burden on her mother because of her father's invalidism. She felt her mother had been accepting of her behavior during childhood, but had made no effort to instruct her in sexual matters beyond information concerning menstruation. She also felt that her mother had pressured her into dating at the age of 15 when she was not interested nor felt that she was ready to date. She also considered this as an effort to get rid of her, so that her mother could devote herself solely to the care of her father.

The patient had dated her husband for several months prior to marriage during which time he constantly pressured her for sexual intercourse. Finally he threatened to drop her in favor of another girl at which time she allowed him to have intercourse and subsequently became pregnant. The patient informed her mother of the pregnancy at which time arrangements were made for her to be married. She expressed her marriage as a necessary action in order to make it "all right" (to have sexual intercourse). She denied being in love with her husband and continued to deny any feelings of affection for him. She defined her marital role as "just being there" with no enjoyment or orgasmic response. Sessions with the children revealed extreme withdrawal and depression in the 14-year-old daughter who stayed away from home as much as possible, locked herself in her room, and would not talk to her mother. She expressed waiting to be old enough to get away from home. The younger boy was a behavior problem who frequently ran away from home and refused to go to school. The patient expressed little concern about the children stating that "they would get over it" and that her husband could do more than she could for them. She frequently mentioned that no one knew how she felt so they were no help to her.

Conjoint therapy with the husband revealed that he was not aware his wife had any hostile feelings toward him and that her sexual coldness was "just the way she was", which he had accepted without question. He was angry and indignant when she told him of her feelings of being forced to have intercourse with him prior to marriage, stating that she was willing and participated actively, which she strongly and angrily denied.

The patient was given to screaming fits from time to time, and had on several occasions taken an overdose of medication, feeling that she could no longer tolerate the death of her child and being totally preoccupied with her feeling of grief and loss. She consistently refused to accept the idea that the occasion of the child's death gave her the opportunity to withdraw from her role as wife and mother, preferring to believe that her situation was totally unique and that, although she did not enjoy being so unhappy and depressed, she could not help it and possibly would have to remain that way the rest of her life. Because of her lack of education and training she felt that she had no alternative but to stay in the marriage, although she brightened considerably when her husband told her he was getting fed up and was considering taking a job in another state, leaving her and the children with her parents.

B.H.

Mrs. B.H. was a 37-year-old visiting nurse who was referred by her supervisor because of severe depression, constant weeping, and inability to perform her duties. She had married at the age of 16 after discovering that she was pregnant. She felt that she was trapped into the marriage as she was too young, uneducated, and had no means of making a living for herself and her expected child. The patient stated that she had always felt sorry for her mother whom she described as having had a hard life because she was married to an alcoholic, the patient's father. She always felt neglected and left out as her mother had to work and was not able to stay at home and care for her children. She feels that she would not have gotten pregnant if her mother had taken care of her by explaining sexual matters to her and not letting her date at an early age. She felt that her husband had taken advantage of her because she was ignorant. After the marriage she could not stand for her husband to touch her and would literally put herself into a dissociative state during intercourse, at which time she had no feeling and did not respond. She had another child one year after the birth of her first child.

During the marriage she had frequent affairs and during one of these with an older man she again became pregnant. She had felt that this man loved her, but when he suggested an abortion she realized that he had no intention of

becoming further involved with her. He paid for her abortion after which she felt totally disillusioned and distrustful of all men. After 15 years of marriage she got a divorce and allowed her husband to have custody of her two sons. She remained single for four years during which time she went into nurses training and received her RN degree. For three of the four years that she was single, she dated her present husband who was married. During the time they were dating she was able to enjoy sexual intercourse and felt that she had overcome her aversion to sex. After he divorced his wife and married the patient she became suspicious of him, watched him constantly, followed him, checked his clothing, and accused him of having affairs with other women. At the same time she felt that she was unworthy and was constantly fearful that he would leave her as he had left his former wife. She felt that he was more interested in his job than he was in her although he gave her beautiful clothes, jewelry, furniture, a car, a new home and everything that she had always wanted. She became exceedingly depressed, was not able to continue her work as a visiting nurse and described herself as bitchy, unworthy, and guilty because of her premarital pregnancy at age 16 and later because of the abortion. She described her husband as being irresponsible, a liar, a gambler, and a spendthrift and verbalized that she actually wished that he was crippled so that she could take care of him. She did not want her husband to know that she was seeing a psychiatrist. However, when she did tell him later he laughed at her and accused her of being crazy, refused conjoint therapy and continued to use her therapy against her as a sign of weakness and inability to cope. They had frequent violent quarrels and arguments during which times either one or the other would pack their clothes and leave, later returning, making up and achieving better than usual sexual satisfaction. It became apparent that their relationship was sado-masochistic and she was unable to tolerate the material success or the sexual adequacy she was experiencing in this marriage. During therapy she was encouraged to accept her ability in all areas and allow both herself and her husband some personal freedom to engender a trustful situation.

A.F.

Mrs. A.F. was a 35-year-old housewife who

sought therapy because of intense hostility toward her children especially in the absence of her husband who was a career pilot with the Air Force. She was also a diabetic and occasionally drank beer to excess during which time she was verbally and physically abusive toward her three daughters, cursing, beating, and humiliating them. She had always felt that her mother preferred her brother who was one year older and had also felt deprived of her mother who was a schoolteacher and was not at home to attend to the children. She had never been sure of her academic achievements because of her mother's influence in the schools which she attended. However, she did excel in sports and credited herself with having a "perfect body" until she discovered when she was about 25 years old that she was a diabetic at which time she refused to maintain her diet or to take her insulin regularly and started drinking.

Mrs. A.F. was intensely hostile, argumentative, and resistant during therapy, viewing the therapeutic situation as a trial or a means of proving her crazy in order to take the children away from her. Although she verbalized intense hatred of the way her children behaved and wanting to be rid of them, she was acutely aware of her affection for them and her conscious attempts to ward off feelings of warmth which she explained as an effort to keep them from loving her so they would not miss her when she died. She was convinced that she would not live long because of her diabetes and occasionally had entertained suicidal thoughts. The patient had always seen her father as very passive and ineffectual, her mother as cold, domineering, and rejecting. She recalled her mother explaining to her that all men ever wanted was what was between a woman's legs, and also going into great detail about how much she had suffered delivering her, creating the impression that she should never have been born.

In describing her courtship with her husband she stated that she had been warned of his sexual prowess and was prepared to defend herself. In one of the conjoint sessions she screamed at him, "you shafted me", and totally denied that she had in any way participated in the initial sexual encounter. She later described this as being the only reason she had married in order to atone for her indiscretion, feeling it was an absolute commitment and obligation. Ses-

sions with the children revealed a vast amount of pathology centering on their view of their mother as cruel, heartless, and selfish. Her 14-year-old daughter was severely depressed, stayed in her room, would not go out socially, cried a lot, and felt that her mother hated her intensely. She described mainly the derisive verbal attacks and name calling by her mother, and her own feelings of being forced to withdraw from the family even though she would have preferred to be with them. The second daughter, age 12, emulated her mother by being aggressive, defiant, and active in sports. At times when she was openly defiant toward her mother, the mother pulled her hair or struck her across the face. The youngest daughter, age 10, had learned by observation of her sisters and sought to please and placate her mother in every way, thus earning her mother's indulgence and causing the other two to accuse her of being the pet. However, she was unpopular with peers as she fantasied, bragged, lied, and stole money to buy gifts for her mother.

Mrs. A.F. had frequently threatened to leave her husband, stating that he was off flying around the country, leaving her to be both mother and father to the children and to assume all the responsibility for the family. However, she had not seriously considered divorce because of her lack of training and education, and therefore her inability to provide for herself and the girls. Her husband felt that he had devoted his entire life to his wife and children, rationalizing his long and frequent absences as necessary because of his profession and that even if it were otherwise, his wife would never be satisfied. He had always relied on his mother-in-law to supervise his wife and children in his absence, and depended upon her to provide funds for things the family needed from time to time. At the same time, he complained that his mother-in-law was always buying things for his family and usurping his position as provider. During one of the conjoint sessions when his wife announced that she was going to divorce him, he accused her of wanting to run around, implying that if she did get a divorce, she would be sexually promiscuous. He complained of her sexual frigidity but stated that he had remained faithful to her in spite of many opportunities to be otherwise because he loved her. When pressed to explain why he loved her he replied, "damned if I know". He

related that she had been a happy, carefree, fun-to-be-with person prior to marriage but that she had changed overnight subsequent to the marriage ceremony.

Mrs. L.D.

Mrs. L.D. is a 27-year-old housewife whose initial complaints were obsessive thoughts, compulsive handwashing and cleansing rituals.

Since the birth of her youngest child eight weeks prior to therapy, she had felt that everything in her house was contaminated and poisonous. She washed and rewashed all dishes and cooking utensils, scrubbed floors and woodwork, clothing, doorknobs, and insisted that her husband make the baby's formula. She had withdrawn from all social activities, fearful that she would say something unacceptable to the people whom she met.

The patient is an only child whose mother worked in a factory and left her with friends by whom she was accepted and treated as a member of the family. Her father had left her mother when the patient was two years old and she did not see him again until she was age 10.

The patient states that her mother never discussed her father with her, but would always tell her that she was just like her father and his family who were "no good". She could never please her mother and always felt that her mother wanted her to be different than she was. Her mother constantly reminded her that she had to work to give her things, and although the mother blamed the father for abandoning them, the patient felt guilty and wished that she had never been born.

The patient was popular in high school and did well in school, but her mother never praised her and rejected all of her boyfriends. She received no sex education from her mother, and feels that she became involved sexually with her husband prior to marriage in an effort to get away from home, and relieve her mother of the financial burden. However, she blames her husband for taking advantage of her because of her ignorance and vulnerability. She did not feel that her mother would let her get married unless the situation was unavoidable, which of course, pregnancy guaranteed.

She feels guilty about having to go to work when her first child was six weeks old, and verbalizes resentment toward her husband for not

making more money, which also reflects her feelings of abandonment by her father.

She is concerned about not being able to relate to her oldest child, who is now eight years old, and has to force herself to play with her. She also rejects the eight-month-old baby, stating that she was depressed during the entire pregnancy and now feels that she will hurt her or drop her. At one time when she brought the baby to her therapy session, she threw a diaper over the baby's face while she was changing it. She was not aware of this action at the time, but when it was brought to her attention at a later session she overreacted and went to great lengths to explain that this was a game that she played with the baby.

She has never been able to reach orgasm and resents having sex with her husband. She feels that he will not let her do what she wants to do, does not want her to wear her hair long, tells her she should not criticize her mother, and yet she readily admits that if he were perfect she would find something to complain about. She cries frequently and has suicidal thoughts, but feels she is too cowardly to ever do anything about it. If her husband does not include her in his plans, she feels abandoned and trapped with the children. If he does include her, she feels so undeserving and guilty that she cannot enjoy herself and makes everyone miserable.

Conjoint therapy with the husband, who was reluctant to participate, revealed a very passive, rather inadequate male who was at a loss as to what his role should be and somewhat resentful of his wife's inability to cope with her family. He could offer her no emotional support which further increased her anxiety and helplessness (rage).

The patient's mother was a very plain, somewhat withdrawn, 50-year-old woman with flat affect who could not recall any particulars of the patient's childhood; her toilet training, teething, age of walking, talking, etc. She presents herself as a long suffering non-complaining, hard working person whose whole life was devoted to her daughter. She stated that she had never remarried because the patient was jealous of her suitors and described the patient as a good, happy, obedient, well adjusted child. The patient was present during this interview and wept throughout.

Mrs. C. K.

Mrs. C. K., a 38-year-old housewife, complained of overwhelming depression, suicidal thoughts, inability to relate to her children, hatred and revulsion toward her husband, and a constant repetitive thought "kill" which popped into her mind at the most inappropriate times.

The patient was the third child and had often been told by both her parents of the difficulties of her birth, how her mother had been "torn up" resulting in her concluding at an early age that she should never have been born. This feeling was reinforced when after the birth of her first child her mother warned her not to get pregnant again saying "look what happened to me".

The patient recalls her mother as being cold, undemonstrative, and constantly quoting homilies, that is, handsome is as handsome does, if you make your bed you must lie in it, etc. Her mother also described men as beasts and reminded her daughter that men were only interested in women for one thing. The patient quarreled throughout her childhood with her older sister and both sisters were jealous of each other. The patient felt that her father indulged her more to make up for what he considered to be an unusual relationship between the mother and the older daughter. The patient recalls having had no restrictions placed on her during her teens, which she interpreted as mother's lack of concern. As a result she became her own regulator, setting times for coming in after dates and parties, but being resentful of having to do this for herself. She graduated from high school and college and in her senior year married her present husband whom she felt was very stable and offered her security.

Although they dated for a year prior to marriage and had sexual relations, the patient was hesitant about getting married, feeling that there was something missing in the relationship. She was tempted to see a psychiatrist prior to marriage but did not follow through on this. She also felt that she had no alternative to marriage because of her sexual involvement, and felt obligated to marry her husband in order to alleviate guilt feelings about the premarital sexual relation.

Although she had initially seen her husband as stable and reliable, she found out after marriage that he relied entirely on his father to

make decisions concerning his work, the location of their home, and what moves to make in his business. She began to feel that her husband accepted her as a part of the household equipment or one of the appliances.

From the beginning, their sexual relations were unsatisfactory as her husband had premature ejaculations and made no effort to satisfy her. At the onset of therapy she had withdrawn from him sexually and described herself as a witch, being mean, demanding, crabby, and hostile with her two daughters ages 14 and 8.

The patient felt that for 17 years she had been isolated in the country, subject to her father-in-law's decisions, and left with the responsibility of disciplining and educating the children as her husband constantly played the role of the good guy, bringing them presents and playing with them, but often indulging them over her objections and against her efforts to maintain a healthy routine. In the community the husband presented a model facade, being active in the church, kind to his friends and neighbors, loaning money or signing notes when his own business was not financially stable. The patient also felt that her husband did not want her to know anything about his business, even though he relied on her to take phone calls and keep track of him when he was out of pocket. He frequently went on trips with his men friends and business associates.

The patient was unable to see herself as being deserving of fulfillment. Although she acknowledged deprivation in all areas: sexual, emotional, and intellectual, she felt old, ugly, useless and helpless to even consider alternatives, mainly because of the financial security and the obligation to her children.

Conjoint therapy revealed passive-aggression from the husband wherein he belittled her intelligence, ridiculed her efforts to engage him in any discussion by playing innocent and asking her what more he could do to satisfy her. He rationalized his premature ejaculations on the basis of organic disability stemming from an orchitis at the age of 16, when a physician had told them that he possibly would not be able to have children.

The husband was the only male child in a family of four and recalled his entire childhood as being spent avoiding anything which could displease his mother. He had had no sexual ex-

perience prior to his engagement to his wife, and even denied ever thinking about sex as he was too busy playing football, basketball, and doing things that boys do. He often accused his wife of trying to get him to blow his stack and once asked her if she had a gun with which she intended to shoot him. His main concern was having a family and a home, feeling that he would be considered a failure by the community if his wife left him. He readily acknowledged that his wife hated him, but was totally unable to give any reason for this, as he saw himself doing everything he could to make her happy, being a good husband as he had been a good son.

Interviews with the children were interesting as both had adopted the father's attitude of denial and innocence until it was directly presented to them that their parents were incompatible. After this they both acknowledged that they had known of the conflict all their lives and were ready to make a change if necessary as they were tired, bored, and disgusted with their mother's demanding and critical attitude. The older girl had told her mother that she did not like her as a person and would not confide in her,

but did have long talks with one of her friend's mothers. The younger child stated flatly that she wanted to stay with her father and would welcome a new mother if that should be the case.

SUMMARY

The underlying theme of being rejected and/or unwanted at birth was noted in each of these cases. Anger was displaced inwardly or against the offspring, and any acknowledgment of hostile feelings toward the parents created such tremendous guilt feelings that the patient felt death would be more acceptable, as they were convinced that somehow their non-existence would ultimately have pleased the parents. They could consciously deal with hostile feelings toward the spouse centering on the initial sexual involvement, but projected their feelings of deprivation, being used or tolerated by the parents, onto the husbands, which in effect continued the patterns established in childhood. Therapy was directed toward an undoing of these early emotional patterns with a re-evaluation of themselves as contributing members of their present family constellation, emphasizing their roles as mothers, toward whom the children turned for guidance, acceptance, and approval.



Progression of Unilateral Tremor and Rigidity in Parkinson's Disease

In order to learn about the progression of unilateral tremor and rigidity in Parkinson's disease, the authors studied 107 patients who five years previously had tremor and rigidity confined to one side of the body. Of these patients, 72 underwent thalamotomy and 35 were treated medically. The progression of tremor and rigidity to the opposite side of the body was similar in each group. A high proportion of patients whose tremor and rigidity did not spread had an early age of onset of their illness and a relatively high incidence of severe febrile illness prior to the onset of their symptoms. These patients had a benign, slowly progressive syndrome, with minimal incapacitation and relative freedom from typical "midline" signs of Parkinson's disease. Their past history and clinical course suggest that these patients represent a form of Parkinson's disease which is distinct from classical post-encephalitic disease.

Heparin and Ventricular Arrhythmias After Myocardial Infarction

J. V. Russo et al (Johns Hopkins Univ School of Medicine, Baltimore 21205)
Lancet 2:1271-1275 (Dec 19) 1970

It has been suggested that heparin may increase ventricular irritability in patients with acute myocardial infarction because it results in elevation of plasma free fatty acid (FFA). Twenty patients with myocardial infarction or ventricular arrhythmias due to other cause were given heparin in standard therapeutic doses and were monitored for evidence of increased ventricular irritability. A significant rise in plasma FFA was achieved in 15 patients after administration of the drug but there was no evidence of increase in ventricular ectopic beats or other ventricular arrhythmias. Levels of plasma FFA resulting from the therapeutic use of heparin after myocardial infarction do not increase ventricular irritability.

Pre-Marriage Counseling***

Alice Baker Holoubek, M.D.*, and Joe E. Holoubek, M.D.**

Over the past fifteen years or so, my husband and I have been involved in a program sponsored by our church for engaged couples. It has been an effort to help each engaged person to think seriously of marriage; and to realize that the making of a successful marriage involves more than "living happily ever after". The realization that adjustment of themselves to marriage and to each other implies effort, and unselfish effort on each partner's part is emphasized.

Necessarily the content of the program has had to change with the years. The role of the couple—mother as heart of the home (and the stay-at-home) and father as head of the home—has become less stereotyped, since the great majority of the prospective brides now plan to either continue in school themselves or to be breadwinners for the family. Advances in family planning are discussed.

The greatest, most wonderful change, has been the cooperation of members of other faiths in our efforts, so that we now offer the conferences to the entire community with the spiritual talks being given by interested ministers of any denomination. It has been most gratifying that the ministers of different faiths desire to give the spiritual value of marriage so beautifully and that the faith other than that of the speaker is respected. Whether or not marriage is considered a sacrament as in the Roman Catholic Church, it is an intensely spiritual commitment, and we feel that learning of the ritual of other churches is of value to all. Marriage is the usual way of growth of most individuals and of their spirituality, as well as every other type of growth. Ministers offer many insights and help along the way, and we would hope their services would always be available. The instructions as to the deep spiritual commitment so needed for a happy, successful marriage are invaluable.

Marriage, like love, is a many splendored thing, with spiritual, legal, psychological, physical and practical facets.

The day-to-day interpersonal relationship of marriage is usually discussed by a doctor's wife, although the experience of a happy, healthy mar-

riage is the prime requisite. Here the problems of day-to-day living with its inevitable frictions, are discussed. Two individuals, with their differences in personalities, parental, home, peer environment—and the resultant conceptions of what marriage should be, must be amalgamated into one.

Two "complicated me's" must reconcile values and we hope become unselfish, giving, growing partners rather than immature, self-centered grasping "hang-ups". The fact that all growth is a step-by-step process and that a certain amount of maturity and self identity should be present in an individual before he is free enough of himself to be able to grow with and give to another, is emphasized. "Marriage is For Grown-Ups" but if we ever stop growing together, our marriage will stagnate also.

The prime tool of such growth has to be communication—non-vocal, communication via all five senses, etc., is emphasized.

If the needs of the partners are met—i.e.—the need of sexual validation; the need to be valued for oneself, not only for one's output of work; the need to love and to be loved; the need for dependency and independency; the need for intimacy but not engulfment; the need to be needed—the marriage should grow, the partner should grow toward his greatest potentiality with the help of the spouse.

And if this is true, the marriage should be a good one. I take great pleasure in declaring to each group—I am a better, stronger and happier person because my husband not only loves and trusts me, but he tells me that he does, and—that the best gift of parents to their children is to love one another.

Sexuality, a large facet of one's personality is, if mature, the sum total of everything you are as a person. Each act of sex is, therefore, the climax of all the love you have received and all you have given. It is the sum total of what you are—your feelings, communications, prayers, and understanding, expressed finally in this act. If the sum total of all these things is good, your love-making will be good and not destructive.

This leads to our discussion of the physical aspect of marriage, given by a doctor—but never in such a way that the physical is divorced from the need of unselfish love of the partners. It

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has often been debated as to the necessity of outlining briefly the anatomy and physiology of the generative organs. In our experience, however, the need has been so frequent — and often unexpected — that it is briefly given with the teaching of proper terminology. This talk is very effective given calmly, lovingly and frankly and has probably been of as much value to the adult instructors present as the engaged couples. This talk is given to the group as a whole, not segregated as to sex as was previously done.

Impairment of health is a severe drain on any marriage and the health of the couple is so much more important since the newness of the marriage emphasizes its fragility. The pre-marital blood test is not sufficient. A thorough pre-marital physical examination should be done by their respective physicians.

Reverence for the creation of new life is emphasized. The young mother may already have a quite well-developed baby in her womb before she ever realizes she is pregnant. This is additional reason to stress the importance of proper health care for the couple.

The fact that marriage is a legal contract, and there are, therefore, certain regulations and responsibilities involved, is covered by a lawyer. Recently, our County Clerk of Court has made available mimeographed copies of requirements for marriage in Louisiana through the lawyer-speaker. The legal age of the participants, the necessity of a birth certificate, the waiting period between license and marriage, the number of witnesses required, period of time of validation of the license, etc., are covered in this information.

As for the practical, down to earth living-out of married life, the panel of married couples is invaluable. One chairman directs the discussion, but with three or four local couples who have been married varying lengths of time, the discussion soon becomes animated and very instructive. Finances, insurance, in-laws, mutual and non-mutual friends, mis-understanding parents, pregnancy, menopausal mothers and other, small to large, personal to community-wide problems, are freely discussed and at times, solutions suggested. The wedding plans and honeymoon plans; the value of these in proportion to the couple's finances; the disproportionate importance often placed on the honeymoon relationship; the success of the "first night"; the need

of rest after a strenuous social wedding; women's lib and its impact on married life; the mood swings of an individual; night people vs. day people; family planning, etc., including sources of help available to the married couples in the future, are fully discussed.

A Solemn Engagement Ceremony had followed for those who wished to stay for Mass after the Pre-Cana Conferences. In deference to our Protestant friends, both of these were omitted in our inter-faith conferences until they themselves requested that the Solemn Engagement Ceremony be offered for those who desire it. This is a lovely, short service, consisting mainly of scripture readings from Tobias 7 and 8, John 15, 4 to 12.

Now as far as mechanics go. We did not ever desire the movement to be associated with any one church; it is held in our community room — in a meeting room in our local hospital, which is open for civic meetings. However, if such a meeting room is not available, it might take place in one church or another. Usually, Pre-Cana Conferences have been divided into several night meetings of an hour or two duration. We have found it more convenient to have all of the conferences on the same Saturday or Sunday afternoon for so many of the engaged couples are away at school or at work during the week.

The ecumenical program is devised and sponsored by the Committee of Medicine and Religion of the Shreveport Medical Society, the Hospital Work-shop Committee of the Shreveport-Bossier Ministerial Association, the Council of Medicine and Religion and the Pre-Cana Conference of the Shreveport Deanery of the Diocese of Alexandria. The steering committee was composed of two members from each of the above committees with their spouses. They meet quarterly to outline their program. This resulting inter-faith program starts at one o'clock and is completed at six o'clock with the Solemn Engagement Ceremony. Teams of physicians, lawyers, clergymen and married couples of many faiths have been trained to give conferences. At present, we have eight doctors and their wives, four lawyers, eight clergymen, and approximately twenty married couples involved in the program. New speakers are being recruited and trained regularly. Each group goes through a period of training to help them communicate their ideas

to the engaged couples, and also to help stimulate the couples to speak.

Today's young couples have very definite ideas. Their concept of learning is more of participation than of listening, and they wish to present their own ideas. They are encouraged to talk. They are confronted with ideas which help to refine their convictions. It is incomplete to consider that the Pre-Marriage Conference is to inform the people of all the dangers of marriage. They aim to develop attitudes and insights that will be a part of the continued development of the marriages.

Visual aids are usually used in the doctor's talk and may be in the form of short movies in the pastor's talk. The participation of the couples is encouraged by breaking up into small groups for snacks and discussion. The panel usually brings the most vociferous response.

We have no statistical survey to determine the efficiency of these conferences, and I could not possibly recall and give credit to all the help that I have been given in their preparation by books, tapes, lectures, seminars, etc. A very incomplete list of books that we feel of value will be appended.

Members of the conferences have been personally thanked, at times stopped on the street, and we have the impression that the conferences are well received. The ministers feel that it should be of value, giving them some help with their pre-marriage instruction. However, these conferences should never be considered to take the place of the visit of the engaged couple to their minister, and also their doctor. The importance of these conferences with their individual pastor and doctor is emphasized. The beautiful faces of the young couples are inspiring to all of the speakers, and the individual speakers all feel that their own marriage has been enriched greatly.

The physician has a definite opportunity to develop and help organize a Pre-Marriage Conference. This can be done at a very low cost. The four sponsoring agencies share the cost, sending brochures, printing pictures, signs and serving cokes and coffee. Brochures were sent to every member of the Ministerial Association, letters to the pastors of every church in the Shreveport - Bossier area, announcements were carried in the newspapers, a 30 minute TV program outlining the entire program was carried by one of the stations, and short radio and TV

spots have been developed. At present, the Conferences are held every two months. There were 2700 marriage licenses issued in our parish in one year. We feel that with increased spread of this program, conferences can be held every month. The cost of the program is equally divided among the four sponsoring agencies, and should probably amount to \$100 per year.

Booklets, "Beginning Your Marriage" are available as we believe that it is good for the couples to take with them something to help them remember that there are many facets of a successful marriage.

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Plasma-11-Hydroxycorticosteroid and Growth-Hormone Levels in Climbers

C. MacInnes et al (J. D. N. Nabarro, Middlesex Hosp Medical School, London)
Lancet 1:49-51 (Jan 9) 1971

Plasma-11-hydroxycorticosteroid (11-OHCS) and growth-hormone (GH) levels have been measured in a party of nine young men on a week's climbing course. The results are compared with those obtained in their instructor, 11 other men after a day on the hills, and four men and one woman rescued in a state of exhaustion. Plasma 11-OHCS levels were increased on days of considerable physical exertion. In two of the five exhausted climbers unexpectedly low concentrations of plasma 11-OHCS were found. In patients found in a state of collapse by mountain-rescue teams, emergency administration of parenteral steroids might be beneficial.

ELECTROCARDIOGRAM



OF THE MONTH

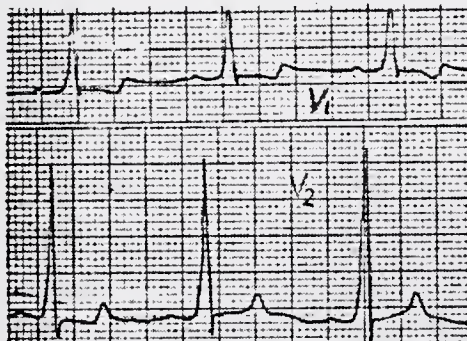
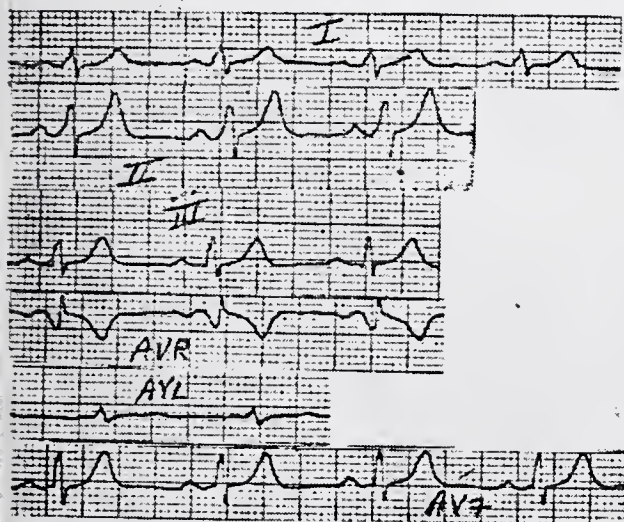
The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 189)

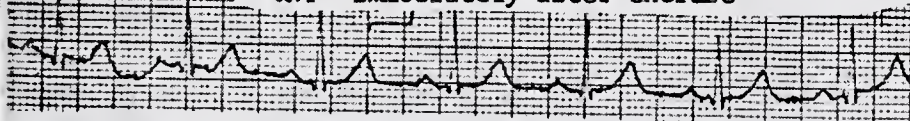
ECG # 32

70 year old white male admitted for evaluation of presumably healed TB.

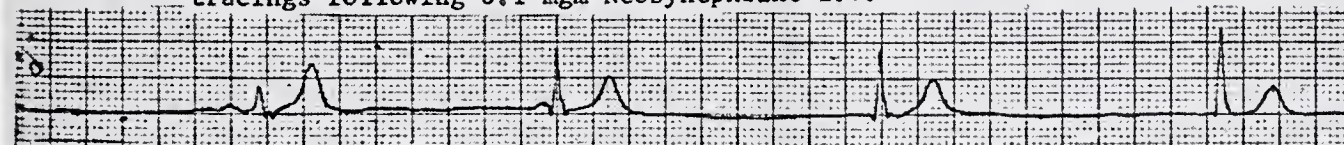
j. Douglas



AVF immediately after exercise



tracings following 0.1 mgm Neosynephrine i.v.



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Histoplasmosis in Arkansas

Harvie R. Ellis, D.V.M.*

Histoplasmosis is a fungus disease with more or less worldwide distribution. The classical area of high endemicity in man and animals is the valley system of the Mississippi River and its tributaries. It has been reported that the infection rate of the disease in domestic animals parallel those in man. The causative agent of the disease is *Histoplasma capsulatum* and the mode of transmission for both man and animals is reported to be airborne by means of inhaling spores from infected soil.

Areas most frequently incriminated in outbreaks of histoplasmosis are usually associated with rather large deposits of poultry and bird droppings. This situation is applied to both urban and rural locations. *Histoplasma capsulatum* is most often isolated from soil which has a history of being inhabited by poultry, wild birds, and bats. The literature describes many human cases of histoplasmosis that were traced to the cleaning of old chicken houses, handling chicken manure, demolishing old buildings, and frequenting dust laden areas that have been used by wild birds or bats for resting and roosting.

Since the frequency of histoplasma infection in the United States differs greatly by area, it is interesting to notice where Arkansas is grouped. According to the data observed, Arkansas falls in the 30-80 percentage classification of positive human reactors to the histoplasmin skin test employed to detect the infection. Most of the states located in the Mississippi Valley are reported to have a similar rating.

Let us examine several of the factors aside from the clinical conditions which may influence the 30-80 percentage rating for histoplasmosis infection in Arkansas. Arkansas is a large producer

of poultry and continuously must dispose of a large quantity of poultry manure. In addition, many species of wild birds either remain or rest in Arkansas during the winter months each year. In 1964-65, an estimated census was made on 21 blackbird roosts for that winter. The estimated count of the number of blackbirds using these 21 roosts was in excess of 75,000,000. There were many more roosts in other locations that did not receive a count. In fact the location was known of at least 13 more roosts. This exceptionally large number of uninvited guests of only one species of wild birds for a period of four to five months undoubtedly has a potential influence on the percentage rate of histoplasma infection present in Arkansas for both man and animals.

The ecological Investigation Program, Center for Disease Control, H.E.W., with a sub-station located in Kansas City, Kansas, conducted a periodic soil sampling program of thirty-one (31) blackbird roosts for a period of about six years (1964-1970). By actual count, ten of the thirty-one (31) roosts sampled yielded positive results for *Histoplasma capsulatum*. This program of checking the soil in blackbird roosts in Arkansas, was discontinued after 1970 because of a reduction in personnel and budget. It is most unfortunate that this soil sampling program of blackbird roosts was discontinued because valuable information on sources of *Histoplasma capsulatum* in Arkansas was being compiled.

Areas containing deposits of chicken manure or bird and bat droppings are not always one hundred percent positive for *Histoplasma capsulatum*. However, the literature on histoplasmosis indicates that the infection is most likely to be acquired by man and animals from areas in nature that possess a high content of chicken manure or bird and bat droppings.

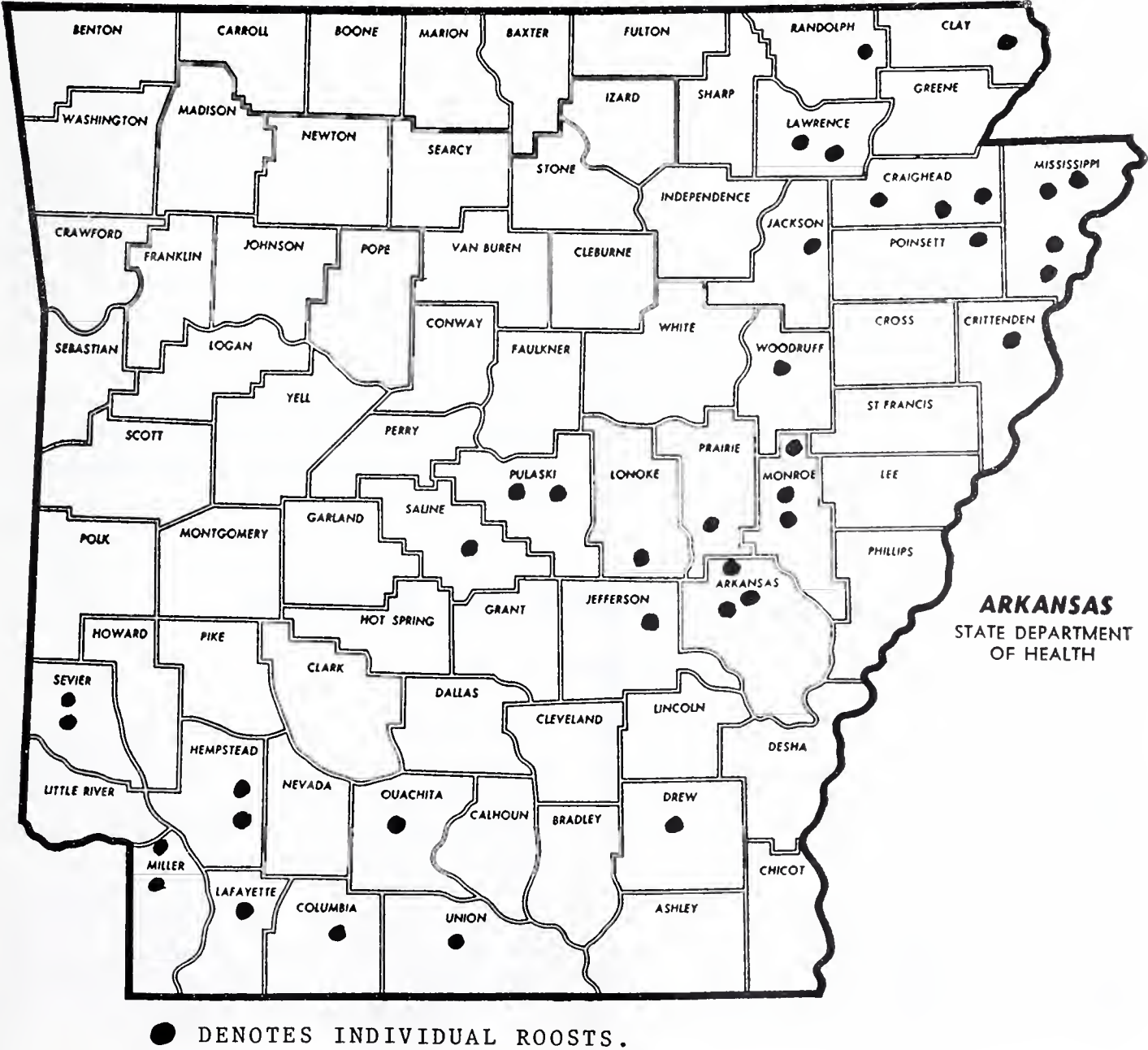
*Director, Division of Veterinary Public Health, Arkansas State Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

There is a great need to further inform the people of Arkansas about the potential danger from histoplasmosis, along with ways to avoid exposure to infection. A map outlining the general location of the many blackbird roosts provides information relative to the potential problems that may be waiting for an opportunity to attract medical attention.

REPORTED CONFIRMED
CASES OF HISTOPLASMOSIS

	<i>Human Cases</i>	<i>Animal Cases</i>
1964	48	14
1965	54	9
1966	61	15
1967	27	6
1968	3	7
1969	7	19
1970	24	4
1971	23	23
1972	17	7

ARKANSAS STATE DEPARTMENT OF HEALTH
Division of Public Health Education
GENERAL LOCATION OF BLACKBIRD ROOSTS IN ARKANSAS
1964 - 1970





EDITORIAL

Maize in Developing Countries

Alfred Kahn, Jr., M.D.

In the developing countries there are dietary problems and this comes as no surprise. There are some cases of actual caloric deficiencies but these are infrequent; there are protein deficiencies; there are "avitaminoses", etc. There are the problems of hyperalimentation with obesity and so called "hyper-vitaminoses" of the fat soluble vitamins.

New facets of nutrition are constantly coming to light. From The Boston City Hospital is a report on "Defective Growth Hormone Secretion After Maize Diets". It is well known that the dietary intake can influence growth hormone secretion as hypoglycemia, certain amino-acids, etc. The importance of this is the fact that diets containing large amounts of ordinary maize were shown to be deficient in lysine and tryptophan, two of the essential amino-acids. New maize has been developed that contains large amounts of these two essential amino-acids, and Columbian children ill with Kwashiorkor will recover eating the new maize. However, Meri-

mee and Finebert (Lancet, Volume II, Page 120, July 21, 1973) commend the new maize but found that it had one undesirable side effect in common with old maize, namely, defective secretion of growth hormone. Human growth hormone was measured in seven healthy men on four different diets including diets high in the old and new maize. Human growth hormone was studied before and after the diets using L-arginine as a stimulant to induce growth hormone secretion.

Growth hormone secretion markedly depressed after high maize diets. The real significance of this is that some of the amino-acid deficiency diseases can be prevented or treated by a diet high in the new maize but if maize is the main source of food, growth hormone may be decreased; in children, this might lead to a significant reduction in growth potential.

Perhaps the small physical size of some of our neighbors in Central and South America is attributable in some measure to their dependence on maize as a dietary staple.

Neutron Activation and Nutrition

Alfred Kahn, Jr., M.D.

The states of a person's nutrition can be measured in many ways. There are vitamin assays using the serum; balance studies measuring the intake and output of certain chemicals such as calcium; the thickness of the fat layer in the skin can be roughly quantitated. More and more refined techniques are becoming available.

The big problem with some scientific methodology is that as the technique gets more refined the studies get more and more elaborate, take

longer to perform, and become vastly more intricate. This is progress of a sort but to this writer the best scientific work is that which explores new areas or develops new equipment which so to speak lighten and simplify.

Neutron-activation consists of irradiating a material with neutrons. The irradiated material undergoes certain nuclear changes and gamma rays are given off; the gamma rays have specific signatures for the various elements. Tissue can

be irradiated. Using a new technique, Harvey et al (Lancet, Volume II, Page 395, August 25, 1973) have measured the "prompt" gamma radiation produced after neutron activation. This technique was used to study whole body nitrogen which is the important building block of amino acids and proteins. Their technique was worked out on cadavers and then applied to living human volunteers.

In all, during one year, 65 subjects were studied — of whom five were normal controls and upon whom 28 studies were made. Sixty ill patients were studied and 162 studies were made. An effort was made to relate the body's nitrogen content to potassium. They found that nitrogen and potassium, both of which are found 95% intracellularly, tend to have a constant relationship to each other. However, nitrogen may fall

or fluctuate in a given subject manipulated by diet or infusions; potassium on the other hand tends to remain constant. When low potassium was found, it was interpreted as meaning there was decrease protein/muscle mass as in cirrhosis, rheumatoid disease, etc.

The authors included three patient protocols to illustrate their work. One involved measuring the nitrogen and potassium in a man before surgery and twelve days postoperatively. He was found to have a drop of 10% in body nitrogen and a 15% fall in potassium. The fall in nitrogen was accompanied by a balance study showing an 80 gram loss of nitrogen in the first week.

New tools extend our horizons of knowledge but their value is in direct proportion to the simplicity of use as well as to the new information obtainable.



M E D I C I N E I N T H E



THE MONTH IN WASHINGTON

In an effort to reach some hard conclusions in the fuzzy area of the impact of various kinds of health insurance on health care, the federal government is starting a \$30 million experiment.

Some of the questions that researchers hope to answer are:

- Would erasure of all financial barriers cause a surge of demand?
- Do deductibles and co-insurance exert a brake on frivolous or excessive use of physicians and hospitals?
- Do families alter their patterns of physician-hospital utilization depending upon their type of insurance? How is their health affected?

The study, handled by the Office of Economic Opportunity (OEO) in conjunction with the Health, Education, and Welfare Department, will cover 2,000 families containing about 7,500 people. It will last up to five years. About 100 families in Dayton, Ohio, will be enlisted shortly.

Four other cities eventually will take part. The participants' identities are confidential.

The HEW Department is slated to take over the project next year. Noting the proposals before Congress for national health insurance (NHI) programs, the OEO says "The federal government will inevitably play a major role in determining the way in which the nation's health insurance plans operate. Unfortunately, current knowledge of health economics is not sufficient to predict the effects of public policies related to health insurance."

Those in the experiment will have to give up existing health insurance policies. New ones will be provided free as far as policy cost is concerned. The coverage will take three basic forms:

- (1) No deductible; no co-insurance. Basically unlimited free medical care.
- (2) \$100 yearly per-person deductible, no co-insurance.
- (3) No deductible, 20 percent co-insurance.

There will be variations on these plans. But all will have a catastrophic provision above a certain amount of out-of-pocket costs determined by some fraction of the yearly family income.

Officials concede that Congress may enact a NHI bill before much meaningful data is accumulated from the experiment. Nevertheless, they say, the information will be valuable and could lead to adjustments in any existing national program.

Benefits will vary in the experimental plans. One will cover all visits to physicians' offices while the patients share hospital costs. Psychiatric care will be limited to 50 outpatient visits annually. Dental care will be confined to children and exclude orthodontic work.

Families of all income levels will be included, up to \$25,000 a year. All participants will be interviewed in depth; about one-third will receive physical examinations.

The experiment is being conducted under a grant to the Rand Corporation, Santa Monica, California; a subcontract for operational work is held by Mathematica, Inc., of Princeton, New Jersey.

No one will be surprised if some commonly-held notions aren't exploded when the project is finished. A little-publicized HEW study, for example, indicates that average costs per medical visit are much cheaper with the private practitioner than at a neighborhood health center or a pre-paid group practice. The estimated private costs ranged from \$6.58 to \$10.63 by specialties. In contrast the cost per visit at 18 well-established neighborhood health centers was \$21.16. The pre-paid group rate was figured at more than \$18.

The report, prepared by the office of the Assistant HEW Secretary for Planning and Evaluation, said that strict comparisons among the three modes of delivery are difficult and subject to interpretation. Yet "the order of magnitude difference was far greater than had been anticipated."

Taking into account all variables, the report said "When related to the estimated private practice average cost per visit the (neighborhood) center physician encounter cost appears to be extreme in nature."

On the surface, though the study group took pains not to put it so bluntly, the report indicated that larger delivery systems might not be

as efficient and economical as the solo practitioner.

The report concluded:

"Like any analysis, this study raised questions which others must examine and answer. Unfortunately, the luxury of time to answer these questions is not available. As we move through a period of rapid social and health policy change the need for these answers becomes almost immediate."

* * *

The Administration hopes to come up with a new national health insurance plan by late September. HEW Secretary Caspar Weinberger said consideration centers around two approaches:

— A combination of employer-mandated coverage plus federally financed catastrophic protection, or

— A national plan modeled after the Federal Employees Health Benefits Program.

The two options listed by Weinberger aren't mutually exclusive. How the Federal Employees Program (FEP) could be translated into a national plan was not explained. Government workers under FEP can choose among high and low indemnity or service plans of private insurers and the Blues with the federal government paying a set share. Pre-paid group practice is another choice. Presumably, a national plan would have the private employers financing the share paid by Uncle Sam for U. S. workers.

The first mentioned plan sounds like the previous Administration proposal with the exception of a strong catastrophic plank plus universal coverage, not provided before.

Whatever scheme is picked, Weinberger said, it will include a partnership concept involving private insurance and public agencies that will (1) assure that all have access to basic comprehensive coverage regardless of lack of sufficient income; (2) will make judicious use of co-insurance and deductibles; and (3) will contain features "to halt or at least sharply reduce medical cost inflation."

* * *

Leonard Woodcock, President of the United Auto Workers, has called upon the Administration to roll back health insurance premiums under Phase IV of the Economic Stabilization Program. The labor leader who is chairman of the Committee for National Health Insurance (CNHI) said the commercial health insurance

industry "has reaped a huge windfall" under Phase II and Phase III regulations.

Woodcock said the six largest health insurance companies had "increased their net gain from group health operation to \$140.1 million last year from \$31.9 million in 1971. . . . A 350 percent increase."

He appeared at a Washington news conference with Luci Johnson Nugent, daughter of the late President Lyndon Johnson, and leading members of CNHI. Mrs. Nugent announced her support of the Kennedy-Griffiths health security bill backed by organized labor and the CNHI.

* * *

Alexander MacKay Schmidt, M.D., has been named Commissioner of the Food and Drug Administration.

Dr. Schmidt, 43, succeeds Charles C. Edwards, M.D., who is now Assistant Secretary for Health of HEW.

From 1970 until earlier this year, Dr. Schmidt was Dean and Professor of Medicine at the Abraham Lincoln School of Medicine, University of Illinois College of Medicine.

Dr. Schmidt previously served in HEW as chief of the continuing education and training branch, Regional Medical Program, from August 1967 until December 1968. From there he went to the University of Illinois College of Medicine as Executive Associate Dean and Associate Professor of Medicine, before being named Dean and Professor of Medicine.

Dr. Schmidt received the Bachelor of Science degree from Northwestern University in 1951 and his M.D. degree from the University of Utah College of Medicine in 1955. From 1960 to 1967 he held various academic positions at the University of Utah College of Medicine.

* * *

The prestigious Brookings Institution has come out with another provocative overview of U. S. Government policies that declares socialism in the European vein "has negligible support in the United States."

"... there appears to be little support for direct provision by the federal government of public services, especially such human services as education, health care, and law enforcement," the report says.

The Brookings report "Setting National Priorities — the 1974 Budget" last year proved a landmark "think piece" that helped set the tone

for the Nixon Administration's domestic policy programs in 1974. That report urged "social experiments" by the government before embarking on major new national programs. Many believe the private foundation's report was a major factor in the Administration's decision to slash the scope of its Health Maintenance Organization (HMO) program to a strictly experimental project.

In the latest report's discussion of national health insurance (NHI), the concept of relating benefits to income is endorsed. This is a prime feature of the American Medical Association's Medigap proposal.

The Brookings report said:

"The type of proposal that seems best adapted to meeting all three criteria of equity, protection and efficiency is a national health insurance plan with income-related benefits. Under such a plan, both deductibles and co-insurance would be related to income so that people would be protected against expenses that were high relative to their income. To prevent undue financial burdens, a ceiling related to income could be placed on the out-of-pocket expenses a family would have to pay. One advantage of such an approach is that a single plan would serve the dual purpose of protecting the poor against normal expenses and protecting higher income people against heavy expenses; hence no stigma would be attached to receiving benefits under the plan."

The Senate Finance Committee has voted a substantial liberalization of the Keogh plan for self-employed people, including physicians, but also added restrictions on retirement savings by professional corporations.

Committee Chairman Russell Long (D., La.) said the reason for the restrictions was the fact that in some cases professional men who had incorporated and who had high incomes could set aside on a deferred taxation basis as much as \$32,500 yearly while the self-employed were limited to a maximum of \$2,500.

Under the new Keogh plan limits set by the Committee, which are expected to win Senate approval, physicians, lawyers and dentists and other self-employed are allowed a deductible contribution to a retirement plan of up to 15 percent of earned income with a maximum of \$7,500 annually. There would be a \$100,000 limit on earned income that can be taken into

account. (Present law limits retirement set-aside subject to tax deduction to 10 percent of earned income but not more than \$2,500.)

According to the Committee, the \$100,000 limit means that "higher income self-employed, desiring to achieve the \$7,500 maximum contribution for themselves, will find it necessary to contribute on behalf of their employees at a 7.5 percent or greater rate."

The same self-employed plan limitations were imposed on retirement contributions on behalf of certain owner-managers of corporations. These owner-managers subject to the limitations would be those having more than a two percent ownership interest in the stock of a corporation but only of all such persons in a particular corporation in the aggregate have more than 25 percent interest in the contributions or benefits of the pension plan.

An increasing number of physicians in recent years have formed professional corporations in order, among other reasons, to be able to invest more in retirement savings plans with tax deferrals than possible under the self-employed Keogh plan.

The new plan, believed to have the endorsement of the Administration, stands a good chance of Congressional approval.

* * *

Congress has been asked to approve practical, realistic programs for reimbursing effective home health care agencies and programs.

The American Medical Association told the Senate Aging Subcommittee the range of home services covered by government programs needs reexamination.

"Physicians . . . who want the best possible care for their patients must be allowed to order and to provide preventive, supportive, and rehabilitative services at home as they presently do at other sites," testified Charles Weller, M.D., a member of the AMA's community health care.

Dr. Weller noted that home care agencies have been protesting the Social Security Administration's policies on the home health provisions of Medicare in as much as less than one percent of Medicare dollars go for this type of health care.

As evidence of the AMA's strong support of the concept, Dr. Weller pointed to the important home health services component in the AMA's Medcredit national health proposal.

"Effective programs of home care services can reduce costly inpatient stays and achieve significant savings," Dr. Weller said.

"In summary, the AMA actively supports the development and expansion of sound home care programs. We will continue to urge that they be covered under both private and public programs. We believe they can aid selected patients, reduce costs, reduce institutionalization, and provide valuable assistance to physicians whose patients participate in them. More education is needed about the benefits of home care programs, and physicians will continue their efforts in this field."

* * *

Aldersgate Medical Camp

The Arkansas Medical Society was one of the contributors to the Aldersgate Medical Camp for 1973. The following report on the camp by chairman Kelsy J. Caplinger, M.D., is published as a matter of information for the membership:

The third Medical Camp was a big success with the exciting addition of a Day Camp. This report is being sent to you because of your interest and support. Thanks very much.

There were 44 campers in RESIDENT CAMP. Diagnoses represented were diabetes, asthma, sickle cell disease, seizure disorders, hyperactivity, emotional disturbances, hemophilia, leukemia, cerebral palsy and arthrogryposis.

The DAY CAMP provided an opportunity for twenty youngsters in wheelchairs and braces to enjoy outdoor life. The Little Rock School District loaned their special bus with the orthopedic lift to transport the campers. This new aspect was a most encouraging and rewarding one. We saw some very fine volunteer help through the Easter Seal Agency.

It would not be practical to list everyone who made a significant contribution this year because there are so many. Special recognition is due the following: Dr. Vida H. Gordon, Dr. and Mrs. Robert Abernathy, Dr. Robert Merrill, Mr. Robert K. Sells, and Dr. Roger Bost. Dr. Harry Harmon and the House Staff did an excellent job with medical coverage. A special contribution was made by the Crippled Children's Services. The Union National Bank of Little Rock contributed \$536,000 to air-condition the infirmary facilities. Some incidental expenses were covered by the Central Arkansas Pediatric So-

ciety and the Arkansas Chapter of the American Academy of Pediatrics.

Donations totaled \$3,366.00. It was close, but thanks to your generosity no medical camper was refused this opportunity in 1973. We will need to seek additional funds in order to expand the camp next year.

The following are some comments by counselors which will hopefully help convey some of the spirit of this camping opportunity. . .

Medical Camp

"It is difficult to know if children with limited communications benefit from a camping situation. This was the case with J. S. Her speech was limited only to repetitions like 'I can't do it now'. When she first arrived at camp the counselors did not feel she should be there. She would not eat, it was impossible to get her to change her clothes, and, in fact, she took a shower with her clothes on. Finally, by trial and error, we learned she needed constant encouragement to do everything from continuing to eat her food to walking up the stairs. When J. S.'s parents came to pick her up on the last day of camp instead of being glad to see them, she clung to the counselors. It gave us all a very rewarding feeling to know that even though J. S. could not tell us verbally she enjoyed her week, she demonstrated her actions that this week at camp was something special".

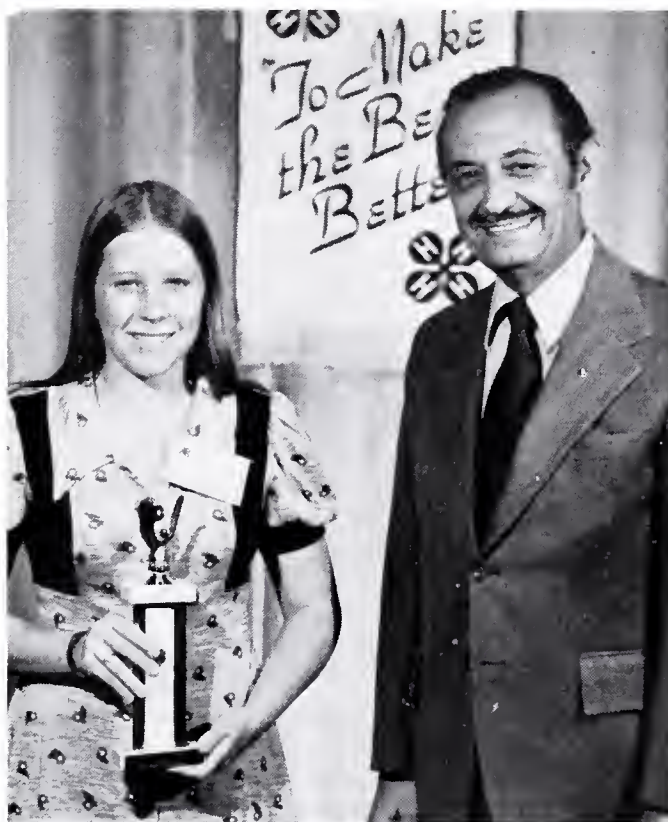
"A ten-year-old boy, G. M., was brought to the infirmary wheezing from asthma. The boy said he didn't mind wheezing a little because his mother never let him play outside. This was one of his first opportunities to do so. His medication was adjusted and he was allowed to participate in the camp activities to the limits of his capacity."

Orthopedic Day Camp

"P. H. is a fourteen-year-old girl, spastic quadriplegic with a speech impediment who is in a wheel chair all of the time. Although shy and quiet at first, she blossomed during her week at camp and by the end of the week she joined in all activities such as singing and even cooked her own hot dog over an open fire. Her biggest thrill was being able to get into the water. She told me that her mother had fallen three years ago carrying her to the water and since that time she had not been swimming. Although almost completely paralyzed, she loved the water. She

thanked us profusely at the end of camp and asked to return".

"An eleven-year-old boy, B. B., post polio with braces up to the shoulders was in a wheelchair and had limited use of only one hand. This child was apprehensive at first and had to be persuaded to attend. After the five days, he wanted to return the next week for resident camp and suggested that we set up a resident camp for 'wheel chair kids'. It was quite a sight to see all of those wheel chairs lined up on the bank of the lake with each child holding a fishing pole".



Dr. Ben N. Saltzman of Mountain Home and Miss Betina Zeh of Benton County.

Dr. Saltzman Presents Trophy

Dr. Ben N. Saltzman of Mountain Home, President-elect of the Arkansas Medical Society and chairman of the Committee on Public Health presented a trophy in behalf of the Society to Miss Betina Zeh of Benton County, first place winner in the State 4-H O-Rama Health Activity Contest. Miss Zeh gave an illustrated talk on "Immunization".

* * *

Christmas Card Addressing Service Offered

The Woman's Auxiliary to the Arkansas Medical Society is sponsoring the second annual Sharing Card during the upcoming holiday season to raise money for the American Medical Association Education and Research Fund (AMA-ERF).

Contribute \$20.00 to the AMA-ERF Sharing Card and individuals or families may have their name included on the card to be sent to every physician in the Arkansas Medical Society and to the faculty physicians at the University of Arkansas Medical Center. Businesses, corporations, or groups may contribute \$40.00 and have their name included to the 1,800 physicians the card will reach Statewide.

Mr. Jack Diner, who does the medical illustrations for the Medical School, well-known for his artistic abilities, is again designing a beautiful landscape for the front of our card. It will be non-sectarian and will contain "Season's Greetings". They will be hand-addressed by physicians' wives in Pulaski County and mailed about December 17th.

Your contribution to AMA-ERF is tax deductible and supports the University of Arkansas School of Medicine with loans to medical students, interns, and residents, and with moneys given to the school to solve financial needs for which there are no appropriated funds.

We hope you will agree that nobody could send to so many for so little. We need your support of medical education. Help us to help others.

Muscle Surface pH as an Index of Peripheral Perfusion in Man

N. P. Couch et al (Peter Bent Brigham Hosp, Boston 02109)

Ann Surg 173:173-183 (Feb) 1971

Muscle surface pH (pH_m) was measured continuously by a tip-sensitive glass electrode in 41 humans (8 normal volunteers, 3 patients having colon resections, 8 patients having arterial reconstructions, and 22 patients on cardiopulmonary bypass). In normal subjects, modest hemorrhage (750 ml) causes muscle acidosis, which is corrected after return of the shed blood. During major surgery pH_m does not change without volume deficit. In acute or chronic regional ischemia, pH_m is also abnormally low, and returns to normal with restoration of normal flow. In patients on cardiopulmonary bypass, pH_m always declined, but to variable degrees. Blood lactate elevations occurred in all subjects and was most intense when the minimum pH_m was less than 7.2. Early use of vasodilator agents along with added volume infusion seems indicated in the latter group.



MAKE CHECKS PAYABLE TO: AMA-ERF AUXILIARY FUND

MUST BE RECEIVED BY DECEMBER 1, 1973

**MAIL TO: Mrs. Paul Cornell, State Chairman
AMA-ERF Auxiliary Fund
7400 Rockwood
Little Rock, Arkansas 72207**

NAME:
(Exactly as you wish it to appear on the card)

ADDRESS: City, State and ZIP Code

County Auxiliary to receive credit:

.... I enclose \$20.00 for individual or family.

.... I enclose \$40.00 for business, corporation, or group.

.... Do not include my name on the card, but I would like to help medical education and I am enclosing a check for \$.....

RESOLUTIONS



W. MYERS SMITH, M.D.

WHEREAS, the recent death of W. Myers Smith, M.D., is noted with sincere sorrow by his colleagues, the members of the Pulaski County Medical Society; and

WHEREAS, he was a highly respected member of the Society for more than thirty years and contributed generously of his time to its affairs; and

WHEREAS, Dr. Smith's contributions to the betterment of the health of his patients and of the community are immeasurable;

BE IT THEREFORE RESOLVED:

THAT this resolution be made a part of the permanent records of this Society; and

THAT a copy of this resolution be forwarded to Dr. Smith's family as an expression of appreciation for his devotion to the profession and to this Society; and

THAT a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

Adopted by

Executive Committee

August 15, 1973

By Direction of the Memorials Committee

T. Duel Brown, M.D., Chairman

Robert Watson, M.D.

Henry Hollenberg, M.D.



THINGS



TO
COME

Arkansas State Nurses' Association Convention

Members of the Arkansas Medical Society and their wives have been invited to attend the initial dinner and Rap Session at the Arkansas State Nurses' Association Convention. The convention will be on Tuesday, October 23rd, at the Camelot Inn in Little Rock. Cocktails begin at 6:30 p.m. and dinner (which is Dutch treat) begins at 7:30 p.m.

According to Mrs. Ethel Rosenfeld, chairman

of the Arkansas State Nurses' Association Liaison Committee, in the past two years the Rap Session has been utilized to talk about matters of mutual concern for both nurses and physicians.

Obstetrics and Gynecology Seminar to be Held

The annual T. F. Bunkley Seminar in Obstetrics and Gynecology will be held at the Scott and White Memorial Hospital in Temple, Texas, November 2-3, 1973. Dr. John Zelenik, Professor of Obstetrics and Gynecology at Vanderbilt University Medical School, will join members of the Scott and White Staff as faculty for this course.

Problems of menopause, menstrual abnormalities, contraception, and cancer detection and treatment will be discussed in this conference on "Office Gynecology". Family physicians, gynecologists, surgeons, nurses and residents in training are invited to attend. This conference is acceptable for Category I credit for the American Medical Association's Physician Recognition Award. For further information contact: Department of Education, Scott and White Memorial Hospital, Temple, Texas 76501.

ANSWER—Electrocardiogram of the Month

Atrial rate = 62/min

Ventricular rate = 62/min

PR = 0.12 to 0.16 — varying

QRS = 0.11 to 0.08 — varying

QT = 0.42 ± 0.02

This is an example of "Pre-Excitation" or Wolf-Parkinson-White syndrome. In this instance, the PR interval is slightly longer than is commonly seen, and normalizes quite dramatically with exercise — notice the difference in the QRS complexes in AVF as well as the PR interval before and after exercise. Note further, that with carotid massage — increasing vagal tone to the A-V node and thus slowing conduction at that site, the pre-excitation complexes (first two) are accentuated in the subsequent three slower complexes of that rhythm strip. Slowing conduction through the normal pathway allows more of the ventricle to be depolarized abnormally via the accessory pathway. Finally, after a vasopressor, the carotid body sets up such intense vagal stimulation that the sinus pacemaker is slowed more than the A-V nodal. At this point the A-V node takes over and conduction is normal — far no stimulus is arriving from the atria to stimulate the ventricle from another site. If through the judicious use of physiologic and pharmacologic maneuvers, this type of change and rhythm can be brought out, confirmation of W-P-W is obvious, and you also learn how good the conduction system is in that patient when he's not being pre-excited. Note the secondary ST-T wave changes in lead V₁ and V₂ . . . these are probably a result of abnormal ventricular depolarization and not of ischemia — the latter might be suspected if the patient didn't have W-P-W.



PERSONAL AND NEWS ITEMS

Physician Moves to New Building

Dr. Larry B. Brashears has moved into his new office building located on South Main Street in Malvern.

Doctor Has Heart Surgery

Dr. Milton Lubin of West Memphis is convalescing at Crittenden Memorial Hospital after undergoing heart surgery at Ochsner Foundation Hospital in New Orleans. Dr. Lubin expects to resume his practice later in the fall.

New Physicians Welcomed

New doctors who recently began practicing in Fort Smith were welcomed to the community at an informal party in September at the home of Dr. and Mrs. Paul Rogers. The new physicians are Joe Paul Alberty, Thomas Amsden, Dennis Fecher, Gary Felker, Jeryl Fullen, Marshall Hyde, R. Paul Kradel, J. G. Atkins, James Busby, Bill Holman, Rick Martin, Charles Paris, Donald Patrick, Donald Pellar, John Pope, John Sigler, William Tate, Eugene Still, Richard Walters, John Wells, Steven Wilson and Hassan Masri.

Doctors Attend Meeting

Dr. Gene D. Ring and Dr. Jerome Luker of Dardanelle attended the 26th Annual Scientific Assembly of the Arkansas Academy of Family Physicians held August 15 and 16 in Little Rock.

Physician Retires

Dr. Edwin L. Dunaway of Conway announced his retirement in early August. Dr. Dunaway began practicing in Conway following his graduation from the University of Arkansas School of Medicine in 1938.

Physicians Locate

Dr. John R. Doss has announced his association with the Conway Clinic in Conway.

Dr. Warner B. Dunlap, a pediatrician, has joined the staff of doctors at the Harris Hospital and Clinic in Newport.

Dr. Van Smith has announced the association of Dr. W. J. Garland, Jr., for the practice of Internal Medicine at the Diagnostic Clinic in Harrison.

Dr. Ted Lancaster has joined Dr. Joe E. Hughes in the practice of medicine in Walnut Ridge.

Dr. Ernest A. Leipold has joined the staff of the Mountain Home Medical Group, P.A., at 353 East Eighth Street in Mountain Home.

Dr. J. D. Bussey is now associated with Dr. Paul A. Wallick at the new clinic located in the Health, Education and Cultural Complex in Monticello.

Dr. J. L. Stinnett, a pediatrician, Dr. John C. Dobbs and Dr. Rex W. Ross, both family physicians, have joined the staff of the Searcy Medical Center, 2900 Hawkins Avenue in Searcy.

Dr. Dale Calhoon has joined the staff of the Durham-McCrary Clinic in Jacksonville.

AAFP Elects Officers

New officers for 1973-74 were elected and installed during the recent meeting of the Arkansas Academy of Family Physicians in Little Rock. They are Dr. Carie Buckley of Fayetteville, president; Dr. Tom Honeycutt of Little Rock, president-elect; Dr. Paul Wallick of Monticello, vice president; Dr. Kenneth Lilly of Fort Smith, secretary-treasurer; Dr. Amail Chudy of North Little Rock and Dr. Guy U. Robinson of Dumas, delegates.

Dr. James L. Grobe of Phoenix, Arizona, President of the American Academy of Family Physicians, installed the new officers.



Further Experience With Prolonged Therapeutic Starvation in Gross Refractory Obesity

J. F. Munro et al (Royal Infirmary, Edinburgh)
Brit Med J 4:712-713 (Dec 19) 1970

Twenty-five patients with gross refractory obesity agreed to be admitted to hospital for therapeutic starvation until they had reduced to within 25% in excess of their ideal weight. Two took their own discharge, four others defaulted from follow-up, and seven discharged for various reasons before completing treatment have regained weight. The remaining 12 patients have been followed for 1½ years; eight are still within a few pounds of their weight on discharge. Therapeutic starvation is justifiable in young patients with gross refractory obesity who are psychologically suitable and socially able to undergo such treatment until their weight is not more than 25% in excess of the ideal.



NEW MEMBERS

Dr. Kurudamanil Simon Abraham

Dr. K. Simon Abraham has been accepted for membership in the Baxter County Medical Society. Dr. Abraham was born in Kerala State, South India. He was graduated from Christian Medical College, Vellore, Madras, India, in 1957. His internship and his residency work in General Surgery and Thoracic and Cardiovascular Surgery was completed at the same institution. From 1957 until 1969, Dr. Abraham was located at the Christian Medical College in Vellore, Madras, where he served as a lecturer in orthopedics and general surgery, senior lecturer in thoracic and cardiovascular surgery and a reader in surgery.

Since 1971, Dr. Abraham has been associated with the Saltzman-Guenther Clinic in Mountain Home.

Dr. Bernice Eileen Gotaas

Dr. Bernice Gotaas is a new member of the Baxter County Medical Society. She is a native of Chicago, Illinois. Dr. Gotaas received her pre-medical education at North Park College in Chicago and Northwestern University in Evanston, Illinois. Her medical education was received at the University of Illinois College of Medicine in Chicago, graduating in 1951. Dr. Gotaas completed her internship at Cook County Hospital in Chicago. Her residency work was done at the Women's and Children's Hospital and the American Hospital of Chicago. Dr. Gotaas was in practice for thirteen years in Chicago before moving to Bull Shoals where she is now in general practice. Her office is located in the Bull Shoals Village Mart.

Dr. Raymond E. Peeples

A new member of the Garland County Medical Society is Dr. Raymond E. Peeples, a native of Arkadelphia, Arkansas. He attended the University of Arkansas and Ouachita Baptist Col-

lege before graduating from the University of Arkansas School of Medicine in 1950.

Dr. Peeples interned at the Chelsea Naval Hospital in Chelsea, Massachusetts. He was in military service from 1939 until 1952. Following his release from the Navy in 1952, he was in the general practice of medicine in Malvern, Arkansas, for eight years. He then began a two-year residency in Anesthesiology at the Charity Hospital of Louisiana in New Orleans. For the past twelve years Dr. Peeples has been in practice in Tulsa, Oklahoma, specializing in Anesthesiology. He is now in practice in Hot Springs, with offices in the Meyer Building. Dr. Peeples is Board Certified by the American Board of Anesthesiology.

Dr. Virgil Lloyd Hayden

Dr. Virgil L. Hayden is a new member of the Jefferson County Medical Society. A native of Sioux City, Iowa, Dr. Hayden attended the University of Arkansas at Little Rock and was graduated from the University of Arkansas School of Medicine in 1969. His internship and residency work in Obstetrics and Gynecology were done at the University Medical Center. Dr. Hayden practiced at the Southern Nevada Memorial Hospital in Las Vegas, Nevada, and the Chickasawba Hospital in Blytheville. He is a Junior Fellow of the American College of Obstetricians and Gynecologists and his office is located at 1706 West 42nd in Pine Bluff.

Dr. J. Frank Beasley

Dr. J. Frank Beasley has been accepted for membership in the Pulaski County Medical Society. Dr. Beasley was born in Memphis, Tennessee. He was graduated from Arkansas State Teachers College in Conway in 1952. In 1960, he was graduated from the University of Arkansas School of Medicine. Dr. Beasley completed his internship at St. Vincent Infirmary in Little Rock. From 1962 until 1965, he was in residency training in Psychiatry at the Veterans Administration Hospital in Perry Point, Maryland.

Dr. Beasley is in the practice of Psychiatry at 1100 North University in Little Rock.

Dr. Horace Newell Marvin, Jr.

Dr. Horace N. Marvin, Jr., is a new member of the Pulaski County Medical Society. He is a native of Little Rock. He received a B.A. Degree from Hendrix College in Conway in 1966 and was graduated from the University of Ar-

kansas School of Medicine in 1970. Dr. Marvin interned at St. Vincent Infirmary in Little Rock.

Dr. Marvin is now associated with the Cloverdale Clinic in Little Rock, where he is in the general practice of medicine.

Dr. James Sidney Mulholland

Dr. James S. Mulholland, a native of Fort Smith, Arkansas, has been accepted for membership in the Pulaski County Medical Society. Dr. Mulholland received his premedical education at the University of Arkansas in Fayetteville. His medical education was received at the University of Tennessee College of Medicine, Memphis, Tennessee, graduating in 1966. His internship was completed at the John Gaston Hospital, University of Tennessee, City of Memphis Hospitals in Memphis. His residency work in General Surgery during 1967-68 was at the same institution. From 1968 until 1971, he was in residency training in Orthopedic Surgery at the Campbell Clinic in Memphis.

Since July 1973, Dr. Mulholland has been associated with the Arkansas Orthopedic Clinic at 500 South University in Little Rock.

Dr. William Alfred Runyan

The Pulaski County Medical Society has announced that Dr. William A. Runyan is a new member of that Society. Dr. Runyan was born in Little Rock. He attended the University of Arkansas at Fayetteville and then entered the University of Arkansas School of Medicine, from which he was graduated in 1967. Dr. Runyan interned at St. John's Hospital in Tulsa, Oklahoma. His residency work in Orthopedic Surgery was at Barnes Hospital in St. Louis, Missouri.

Dr. Runyan is associated with Drs. Elvin Shuffield, Ewing Nixon and Harold Hutson in the practice of Orthopedic Surgery at 1000 Wolfe Street in Little Rock.

Dr. James Mannon Sims

A new member of the Pulaski County Medical Society is Dr. James M. Sims, a native of Searcy, Arkansas. From 1953 until 1957, he attended Hendrix College in Conway and in 1961 he was graduated from the University of Arkansas School of Medicine. His internship was completed at Lackland Air Force Base Hospital, San Antonio, Texas. In 1970, he returned to the University of Arkansas Medical Center for his residency work in Psychiatry, which he completed in June 1973.

Dr. Sims specializes in Psychiatry at 324 West Pershing Boulevard in North Little Rock.

Dr. Robert Harrison Janes, Jr.

The Sebastian County Medical Society has added the name of Dr. Robert H. Janes, Jr., to its membership roll. Dr. Janes is a native of Little Rock. He received his pre-medical education at the University of Arkansas at Fayetteville. In 1965, he was graduated from the University of Arkansas School of Medicine. He stayed on at the Medical Center in Little Rock for his internship and a residency in General Surgery, which he completed in 1970. Dr. Janes is Board Certified by the American Board of Surgery. Since July 1972, he has been associated with the Holt-Krock Clinic at 1500 Dodson Avenue in Fort Smith.

Dr. Kenneth Knox Wallace

Dr. Kenneth K. Wallace is a new member of the Sebastian County Medical Society. Dr. Wallace was born in Stamford, Texas. He received a B.A. degree from Abilene Christian College in Abilene, Texas, in 1963. He was graduated from the University of Texas Southwestern Medical School in Dallas in 1966. He interned at Parkland Memorial Hospital in Dallas. Dr. Wallace served in the United States Public Health Service from 1967 until 1969. From 1969 until 1972, he was in residency training in Ophthalmology at the Jackson Hospital and Bascom Palmer Eye Institute, Miami, Florida.

Dr. Wallace has been associated with Drs. Everette Moulton, Stanley McEwen, and Robert P. Hughes, Jr., in the practice of Ophthalmology at 1214 North B Street in Fort Smith since July 1972.

Dr. John Edward Slaven

Dr. John E. Slaven, a native of Little Rock, has been accepted for membership in the Washington County Medical Society. He attended the University of Arkansas and then entered the University of Arkansas School of Medicine, from which he was graduated in 1969. Dr. Slaven completed his internship at the University of Kansas Medical Center, Kansas City, Kansas. His residency work in Pathology was at the University of Kansas Medical Center and the McMaster University, Hamilton, Ontario, Canada.

Dr. Slaven is associated with Dr. Anderson

Nettleship and Dr. Mae Nettleship in the practice of Pathology in Fayetteville.

Pulaski County

The following interns and residents are new members of the Pulaski County Medical Society:

Arkansas Baptist Medical Center

Robert G. Eubanks, Intern

St. Vincent Infirmary

Sam A. McGuire, Resident — Family Practice

John G. Watkins, III, Intern

University of Arkansas Medical Center

Lloyd G. Bess, Resident — Radiology

James E. Boger, Fellow — Cardiology

David R. Crittenden, Resident — Medicine

James H. Fraser, Jr., Resident — Obstetrics/

Gynecology

Robert C. Galbraith, Resident — Neurology

Murray T. Harris, Resident — Radiology

Ruben M. Harris, Resident — Neurology

John E. Hearnberger, Resident — Surgery

Larry H. Johnson, Resident — Anesthesia

Spencer L. Johnson, Resident — Obstetrics/
Gynecology

F. Richard Jordan, Resident — Neurology

Charles A. Ledbetter, Resident — Orthopedic
Surgery

Linda Markland, Resident — Pediatrics

Paul D. Meier, Resident — Psychiatry

Carol Mittelstaedt, Resident — Radiology

Charles M. McClain, Resident — Radiology

Fred Robertson, Resident — Medicine

Ricardo Sotomora, Resident — Pediatrics

Stephen B. Tilley, Resident — Radiology



Survey of Infantile Gastroenteritis

A. G. Ironside, A. F. Tuxford, and B. Heyworth
(Monsall Hosp, Manchester, England)
Brit Med J 3:7-9 (July 4) 1970

In 1967 there were 339 admissions of patients with infantile gastroenteritis to Monsall Hospital in Manchester. One-third of the patients were dehydrated, and in this group over 60% were hypernatremic. An incidence of 58% dehydration was found in 49 infants receiving oral glucose fluids (often hypertonic) before admission, compared with 29% in the other 290, and it appeared that glucose seriously aggravated the disease. Associated respiratory infections were present in 20% and enteropathic *Escherichia coli* were isolated in 16% of the cases. Treatment was aimed at the restoration of fluid and electrolyte balance, usually achieved with oral fluids based on half-strength Darrows solution. Intravenous fluids were only used in the most severely dehydrated patients, including all those with evidence of shock. Antibiotics were only used in the treatment of associated infection, with good effect, and in the enteropathic *E coli* group, with poor effect. Recovery was complete in 320 patients and a further 14 were discharged as healthy carriers of enteropathic *E coli*. There were five deaths in the series (1.5%), three occurring with severe dehydration and shock.

Use of Gastric Function Tests by British Gastroenterologists

J. H. Baron and J. A. Williams (Royal Postgraduate Medical School, Ducane Rd, London)
Brit Med J 1:196-199 (Jan 23) 1971

The choice and use of gastric function tests by clinicians have been studied by a questionnaire returned by 183 members of the British Society of Gastroenterology. Pentagastrin (73%) has largely replaced older drugs (histamine 16%, histalog 8%) as the stimulant of choice for evoking maximal acid secretion. Insulin tests are being used in situations where they are unlikely to provide useful clinical information. Fewer physicians than surgeons measure gastric secretion and they use tests less often. The reluctance of physicians to test patients with uninvestigated dyspepsia or gastric ulcer seems justified, but in patients having dyspepsia with negative x-rays, or after gastrectomy or vagotomy, the greater investigative keenness of surgeons seems commendable. Only half the surgeons ever try to assess the completeness of their vagotomies, and in only one-third of this half is it their usual practice. Criticism is made of the practice of routine measurement of acid in patients with duodenal ulcer, and the use of acid measurements to decide whether a patient should have surgery or which type of operation should be employed.



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The Pap Smear Survey in Arkansas

Anita Schroeder, Ph.D.*

In September 1972, the Task Force on Uterine Cancer of the American Cancer Society, Arkansas Division, Inc., launched a four-year campaign in Arkansas to control cervical cancer through early detection and treatment. To increase the effectiveness of the campaign, there was a need for current information on the status of uterine cancer awareness among women in Arkansas. Such information would include an estimate of how many women in Arkansas had ever had Pap Smear examinations, how often they returned to be re-examined, what demographic characteristics could be associated with those women who regularly had Pap tests, and whether women had any difficulty in obtaining Pap tests. In order to gather this information, it was decided to conduct a statewide survey of women 15 years of age and over.

Methodology

The Arkansas Health Statistics Center agreed to assist the American Cancer Society in the technical aspects of the survey. A sample size of about 500 households was chosen. This number was large enough to obtain the necessary precision, but small enough to be handled efficiently by the volunteer interviewing force. Counties were used as sampling units because area maps were available for each county and because the American Cancer Society is organized by county.

The 75 counties in Arkansas differ so greatly in life style that it was felt expedient to stratify them according to variables corresponding to "female awareness." The concept of "female awareness" could be defined as the knowledge a woman has of the needs and functions of her own body, her ability to recognize irregularities in the systems of her body, and her capacity to seek professional medical help to deal with such irregularities. The basic available indicator of

female awareness is probably education, and thus the 1970 census figures for median years of school completed for persons over 25 were used for the primary stratification. A secondary stratifying variable was the percent of all persons below the poverty level for counties in 1970.

The counties were arranged into six strata based on the two stratifying variables. The strata are listed in Table 1. Using a random number generator, two counties were selected from each stratum. The counties selected were Baxter, Benton, Clay, Columbia, Faulkner, Howard, Jackson, Marion, Perry, Pulaski, Sebastian, and Sevier. The counties selected for the sample, and the sample size per county are given in Table 2.

The total sample of 518 households was first allocated to the six strata in proportion to the total population of each stratum. Each stratum sample was then divided between the two counties in that stratum in proportion to the total population of each county. The county sample number was then assigned proportionally to the urban and rural areas of each county. In each urban or rural area, the sample households were selected using a random number procedure, and location of each sample household was marked on the map.

The questionnaire was developed by the Steering Committee of the Task Force on Uterine Cancer, Dr. Ruth Steinkamp, Chairwoman. The field work on the survey was done between March and June of this year by American Cancer Society volunteers and county extension personnel in the twelve selected counties.

Results of the Survey

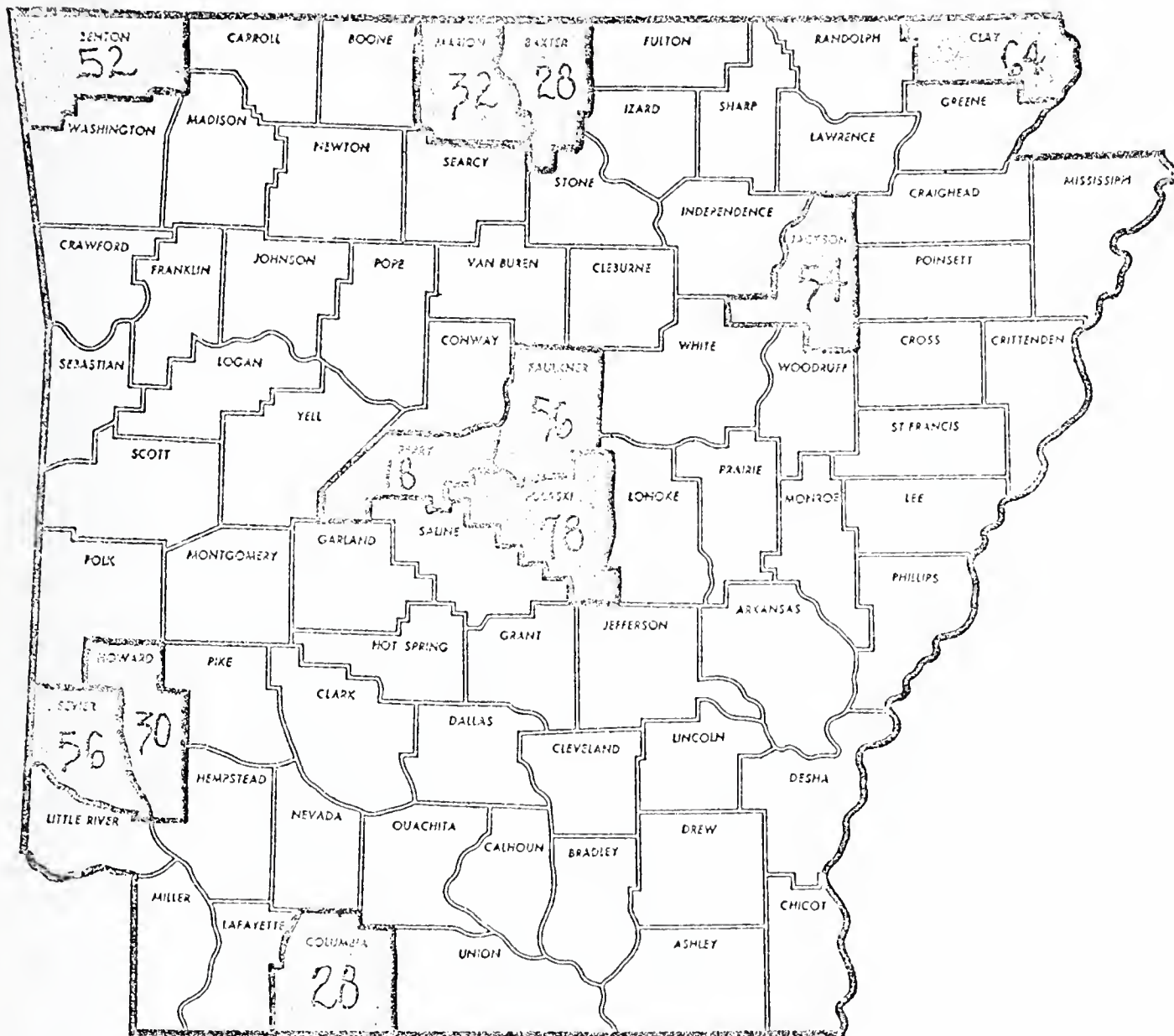
Of the 518 households selected for the survey, 437 were visited and some information was recorded on the questionnaire for a completeness rate of 84%. A total of 501 women were questioned in these households. Table 3 shows a breakdown of the number of women responding by age and urban-rural classification.

*Arkansas Health Statistics Center, 400 Southland Plaza Building, Little Rock, Arkansas 72203.

TABLE I
Counties within each stratum arranged according to median years of school completed for persons over 25, lowest to highest, and percentage of persons below the poverty level.

STRATUM I					
County	Median Yrs. Education	% Below Pov. Level	County	Median Yrs. Education	% Below Pov. Level
Lee	7.8	50.6	Mississippi	8.9	35.3
Phillips	8.5	48.2	Scott	9.0	31.4
Chicot	8.5	52.3	Prairie	9.0	32.9
Clay	8.6	36.3	Van Buren	9.0	34.7
Stone	8.6	47.3	Sharp	9.1	30.8
Madison	8.7	36.0	Johnson	9.5	30.0
Searcy	8.7	41.8	Logan	9.5	30.9
Lincoln	8.7	44.4	Yell	9.6	21.7
Newton	8.7	46.3	Howard	9.7	20.6
Monroe	8.7	47.5	Little River	9.7	26.4
Cleburne	8.8	36.9	Pike	9.7	28.6
Woodruff	8.8	43.1	Polk	9.7	28.7
Fulton	8.8	44.9	Cleveland	9.7	34.3
Perry	8.9	36.3	STRATUM III		
St. Francis	8.9	42.8	White	9.8	27.3
Crittenden	9.0	40.6	Marion	9.8	31.7
Desha	9.0	42.3	Montgomery	9.8	36.4
Nevada	9.4	36.4	Dallas	9.9	29.6
Lafayette	9.5	39.2	Franklin	9.9	30.0
			Calhoun	9.9	31.0
			Craighead	10.0	22.7
			Lonoke	10.0	33.0
Poinsett	8.3	32.6	Drew	10.0	34.3
Randolph	8.6	33.5	Bradley	10.0	35.0
Lawrence	8.7	34.0	Crawford	10.1	25.4
Cross	8.7	35.1	Arkansas	10.1	29.4
Greene	8.8	25.2	Sevier	10.2	22.9
Izard	8.8	31.0	Independence	10.2	28.1
Jackson	8.9	30.3			
STRATUM IV					
			Hot Spring	10.5	21.3
			Ashley	10.5	30.5
			Ouachita	10.6	30.3
			Columbia	10.6	30.6
			Pope	10.7	24.3
			Saline	10.8	14.0
			Miller	10.8	22.4
			Clark	10.9	26.0
			Benton	11.0	19.4
			Boone	11.0	23.3
STRATUM V					
			Jefferson	11.1	30.7
			Garland	11.3	25.1
			Baxter	11.4	26.9
			Union	11.5	24.8
			Washington	11.8	18.3
			Faulkner	11.8	20.2
STRATUM VI					
			Sebastian	12.0	16.9
			Pulaski	12.2	17.9

TABLE II
Counties Selected for Sample
Sample Size Per County



Analysis of the survey data was performed by the Arkansas Health Statistics Center. Calculations which were made using a formula based on the stratification showed that an estimated 63% of the women in Arkansas age 15 and over have at some time in their lives had a Pap Smear examination. For women in urban areas, the estimated percentage increases to 72%. For those women in rural areas, it decreases to 57%.

Of the women age 15 and over in Arkansas, calculations based on the stratification showed that an estimated 49% have had a Pap test in the last two years. For women in urban areas, the estimate is 55%. For women in rural areas, it is 42%.

TABLE III
Number of Women Interviewed by Age,
and Urban or Rural Residence

Age	6-16	17-44	45-64	65+	Missing	Total
Urban	10	100	49	30	32	221
Rural	15	127	86	34	16	278
Missing	0	0	1	1	0	2
Total	25	227	136	65	48	501

Note: Age groups were chosen to conform to those used in other surveys. Since the questionnaire was answered only by women 15 years of age and over, only 15 and 16 year olds are included in the lowest age group. An urban area is defined as a city or town with a population of at least 2500 persons.

Observations from the Sample

The following results apply only to the sample and should not be taken as absolute percentages for the entire state. These results do point out likely trends, however, and they may serve as indications of the need for uterine cancer information in certain demographic groups.

The amount of education a woman had was an excellent indicator of her familiarity with the Pap test and of her tendency to have such an examination performed. Table 4 shows, for example, that 64% of the women in the survey with 10-12 years of education had had a Pap test at some time in their lives. Only 49% of those with a ninth grade or lower education had had Pap tests. Of the women surveyed with at least one year of college, some 81% had had Pap tests. Similar trends hold for the percentages of women having Pap Smears in the last two years.

The survey also showed that very young and very old women in the sample were less inclined to have Pap tests than were women in the middle age range. The reasons for this occurrence as recorded on the questionnaires, were basically that young women who were not sexually active

did not feel they needed Pap tests, while older women were often not familiar with the Pap test. Table 5 shows the responses of women in the different age groups to the survey questions.

Some general observations from the survey are given below:

1. Urban women were more likely to have had Pap tests than were rural women, but they were not significantly more familiar at the .01 level of probability with what the Pap test was than were rural women. There was no significant difference at the .01 level in the numbers of urban and rural women who reported having family doctors.

2. A smaller percentage of black women had Pap tests than did white women. The actual number of black women sampled however was too small to yield any valid conclusions based on race.

3. Only 10% of the women sampled felt that the Pap test was too expensive, and analysis showed that cost had no effect on whether a woman ever had a Pap test.

4. Women who had family doctors were more likely to have Pap tests than women who did not have a family doctor. Most women sampled

TABLE IV
Education and the Pap Test
Years of School

	Under 9 years	10-12 years	13 or more years
Number in sample who were familiar with Pap Test	86	191	84
Number answering question	120	221	85
Percent	72%	86%	99%
Number in sample who had ever had a Pap Test	56	143	66
Number answering question	114	223	81
Percent	49%	64%	81%
Number in sample who had had a Pap Test in the last two years	33	117	63
Number in sample answering question	117	221	86
Percent	28%	53%	73%

TABLE V
Age and the Pap Test
AGE

	Under 16	17-44	45-64	Over 65
Number in sample who were familiar with Pap Test	11	201	119	35
Number answering question	22	226	131	61
Percent	50%	89%	91%	57%
Number in sample who had ever had a Pap Test	1	145	93	31
Number answering question	21	210	131	62
Percent	5%	69%	63%	50%
Number in sample who had had a Pap Test in the last two years	1	134	67	17
Number in sample answering question	23	224	125	63
Percent	4%	60%	54%	27%

(86%) had Pap tests done in their doctor's office rather than in a maternity or family planning clinic.

5. Of the women in the sample who had Pap tests, 71% received a report of their test, and of these, 58% stated that they received this report within a week.

6. Some 91% of the women sampled said that it was convenient for them to go to a doctor's office or clinic. Urban women were more likely to respond that it was convenient for them to go to a doctor than were rural women, but the number was significantly different only at the .05 level of probability.

7. Of the women in the sample who had had a Pap test at some time in their lives, 83% had had one in the last two years. Of *all* the women sampled, only 49% had had a Pap test in the last two years.

Summary

At the 1970 census, Arkansas had a population of 725,377 women age 15 and over. Thus since 63% of the women age 15 and over in Arkansas are estimated to have had at least one Pap test at some time in their lives, close to 457,000 Arkansas women have had Pap tests. This result also means that approximately 268,000 women in the state have *never* had a Pap test. Similarly, applying the state percentage for women who have had a Pap test in the last two years yields an estimated 370,000 women in the state who either have *never* had a Pap test or who have *not* had one in the last two years.

The survey results indicate that almost half of the women in Arkansas (51%) either need to have a Pap test or need to have a Pap test more often. Women in rural areas need to receive more attention in the uterine cancer campaign than women in urban areas. Likewise, women in the lower educational ranges are more in need of uterine cancer information than are women with higher educations. Some attention should be given to women in their teens to inform them of the need for Pap Smear examinations. Similarly, elderly women need to be reminded to have regular cancer checkups.

Acknowledgments

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operative Extension Services, the county extension personnel, the American Cancer Society volunteers who performed the field work, and the respondents and their families.

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Subacute Sclerosing Panencephalitis

J. R. Lehigh et al (Wistar Institute, Philadelphia)

Arch Neurol 23:97-102 (Aug) 1970

Hamsters inoculated intracerebrally with cultured brain cells derived from biopsies of patients with subacute sclerosing panencephalitis (SSPE), and with cell-free suspensions of the SSPE viral agents isolated from these brain cultures, developed clinical signs of encephalitis and died 9 to 18 days after inoculation. Histological lesions of encephalitis were present in animals dying 14 or more days after inoculation. Two ferrets inoculated intracerebrally with brain tissue from one of the sick hamsters developed encephalitis. Infectious viral agents reisolated from brains of sick hamsters resembled the SSPE agents in the original inoculum in their infectivity for animals and for tissue cultures and in their immunological and ultrastructural characteristics. The SSPE agents proved to be much more neurotropic than measles virus. Only one of the 36 suckling hamsters inoculated intracerebrally with measles virus died, as compared to 25 deaths among 32 suckling hamsters inoculated with equivalent quantities of the SSPE agents. The encephalitis produced in hamsters by the SSPE infectious agents provides a useful, inexpensive, and reproducible in vitro system for the study of these agents.

Colposcopic Evaluation of Abnormal Cervical Cytology

Juan J. Roman-Lopez, M.D.*

The colposcope is an instrument which was developed to facilitate visualization of the cervix and vagina at a magnification of between 10 \times and 13 \times . It was designed in 1925 by Hinselman and was utilized for many years in European countries for the early diagnosis of cervical cancer.¹ With the development of exfoliative cytology, which proved to be a more accurate and generally available screening test, colposcopy lost popularity. In the last ten years there has been a renewed interest in the colposcopic technique; cytology and colposcopy complement each other. Recent literature indicates that colposcopically guided biopsies reduce by 80 to 85 percent^{2,3} the need for cervical conization in the evaluation of abnormal cytology. The establishment of a colposcopy clinic is highly desirable in institutions where a large volume of patients is evaluated for an abnormal smear for cancer; this technique substantially decreases the need for hospitalization and therefore the cost of definitive diagnosis of the cervical lesion. This paper summarizes the author's initial experience with colposcopy.

Materials and Methods

In April 1971, a pilot project was designed to evaluate the usefulness of colposcopy in our institution with particular emphasis on decreasing the cost of diagnosis of cancer of the cervix. A special clinic was established, utilizing existing facilities and personnel of the regular gynecological clinics. All patients with Class II, Class III, and Class IV cervical cytologic smears were given appointments to this clinic. In the first phase of this study 100 patients were to have colposcopically guided biopsies followed by a confirmatory cervical conization or hysterectomy.

Colposcopic examination was performed by means of a Leisegang colposcope which provides a 13.5 \times magnification. The patient was placed in the dorsolithotomy position and a speculum examination performed; the cervix and vaginal mucosa were cleansed with normal saline solution to remove excess mucus and secretions. The cervix and upper vaginal mucosa were then examined colposcopically and all abnormal areas were noted. A solution of 3% acetic acid was

then applied to the cervix. Although the exact mechanism is not known, this solution enhances abnormal areas. Biopsies were then obtained from each abnormal area utilizing a Wittner punch biopsy forcep. A description of the lesion was entered in the patient's chart on a special form which includes a diagram of the lesion (Figure 1). Considerable attention is given to the confines of the lesion, especially endocervical extension. Bleeding from the biopsy site is easily controlled by means of silver nitrate applications or by vaginal packing.

Results

The youngest patient was age 15 and the oldest 72. The average age was 30.5 and the median 26 years. Ten patients were younger than 21 and fifty-one patients were between 21 and 30 years of age. There were only four patients older than 50 years of age.

Only 7 percent of the patients were nulliparous and 44 percent had had three or more children.

In 33 patients repeated cytologic smears were reported as persistent atypical cells or Class II; forty-three patients had suspicious or Class III; twenty-three patients had positive or Class IV smears. One patient had an unsatisfactory smear and because of persistent bloody vaginal discharge was referred to us for her initial evaluation; the cause for vaginal bleeding was not clinically evident.

Table I summarizes the final histopathological diagnosis for each cytological classification; a significant histopathologic diagnosis was defined as severe dysplasia or worse. Of the patients with persistent atypical cytology (Class II), 27 of 33 patients demonstrated a clinically significant histopathologic diagnosis; seven had severe dysplasia, eighteen had carcinoma in-situ, and two patients had carcinoma in-situ with microinvasion. Thirty-four of forty-three patients who had a Class III cytologic smear demonstrated a significant lesion; twenty-eight had carcinoma in-situ, five had microinvasion and one had frankly invasive carcinoma. Of the patients with Class IV smears, twenty-two of the twenty-three had a significant histopathologic diagnosis; two, severe dysplasia; fifteen, carcinoma in-situ; four, microinvasion; one, frankly invasive carcinoma.

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FIGURE I
COLPOSCOPY STUDY
Patient Information Sheet

Patient's Name _____ Date _____

Unit # _____ Gravida _____

Age _____ Para _____

LMP _____ Cytology _____

Colpogram:

COLPOSCOPY

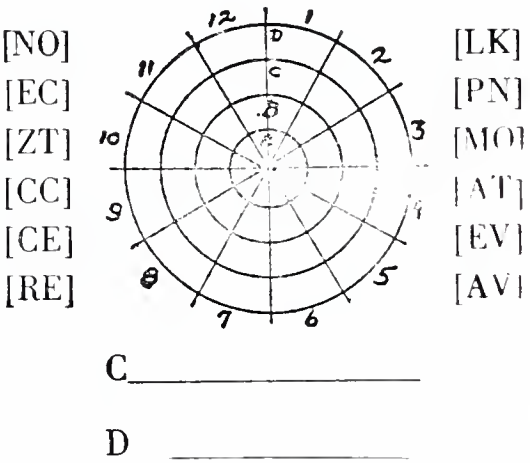
A _____

B _____

Biopsy Results:

Cone Results:

Final Disposition:



Colposcopist _____

- (NO) = Normal (LK) = Leukoplakia
(EC) = Ectropion (PN) = Punctation
(ZT) = Transformation Zone (MO) = Mosaic
(CC) = Nabothian Cyst (AT) = Atypical Transformation Zone
(CE) = Cervicitis (EV) = Erosio vera
(RE) = Regeneration (from previous biopsy) (AV) = Atypical Vessels

TABLE I
COMPARISON OF CERVICAL CYTOLOGY WITH FINAL HISTOPATHOLOGIC DIAGNOSIS

	Benign	Dysplasia			Carcinoma	Micro-	Invasion
		Mild	Moderate	Severe	in situ	invasion	
Unsatisfactory	—	—	—	—	—	—	1+
II	3	—	3	7	18	2*	—
III	4	3	2	—	23	5	I
IV	—	—	1	2	15	4	1+

* One questionable micro invasive

+Colposcopically overt carcinoma

In the one patient who had an unsatisfactory cytologic smear, colposcopic examination revealed an overt carcinoma.

Colposcopy vs Final Histologic Diagnosis

Correlation between colposcopically guided biopsy and final histopathologic diagnosis by hysterectomy is illustrated in Tables II, III, and IV. There was complete agreement between the two techniques in sixty two cases (Table II). In

twelve patients the disagreement was of one magnitude (e.g., severe atypia vs carcinoma in situ) and clinically insignificant (Table III). Therefore, for practical purposes, in 74 percent of the cases the correlation was clinically acceptable. Of the remaining twenty-six percent, the disagreement was clinically significant. In four cases the colposcopically guided biopsy showed the most severe lesion (Table IV). There-

TABLE II
HISTOPATHOLOGIC CORRELATION BETWEEN COLPOSCOPICALLY GUIDED
BIOPSY AND CONIZATION
(COMPLETE AGREEMENT)

No. of Patients	Benign	Dysplasia			Carcinoma in situ	Micro- invasion	Invasion
		Mild	Moderate	Severe			
62	7	1	3	8	38	2	3*

*Conization not indicated (invasive lesion)

TABLE III
HISTOPATHOLOGIC CORRELATION BETWEEN COLPOSCOPICALLY GUIDED
BIOPSY AND CONIZATION
(DIFFERENCE NOT CLINICALLY SIGNIFICANT)

Diagnosis by biopsy		Diagnosis by conization				
Diagnosis	Number of Patients	Chronic Cervicitis	Dysplasia			Carcinoma in situ
			Mild	Moderate	Severe	
Chronic Cervicitis	—	—	—	—	—	—
Mild Dysplasia	1	—	—	1	—	—
Moderate Dysplasia	5	1	2	—	1	1
Severe Dysplasia	5	—	—	1	—	4
Carcinoma in situ	1	—	—	—	1	—
TOTALS	12	1	2	2	2	5

TABLE IV
HISTOPATHOLOGIC CORRELATION BETWEEN COLPOSCOPICALLY GUIDED
BIOPSY AND CONIZATION OR HYSTERECTOMY
(CLINICALLY SIGNIFICANT DIFFERENCE)

Diagnosis by Biopsy	No. of Patients	Chronic Cervicitis	Diagnosis by Conization or Hysterectomy			Carcinoma in situ	Micro- invasion
			Mild	Moderate	Severe		
Chronic Cervicitis	9	0	0	0	0	9	0
Mild Dysplasia	2	0	0	0	0	2	0
Moderate Dysplasia	4	0	0	0	0	2	2
Severe Dysplasia	—	—	—	—	—	—	—
Carcinoma in situ	11	3	0	1	0	0	7
TOTALS	26	3	—	1	0	13	9

fore in 78 percent of cases the colposcopically guided biopsy proved to be clinically effective in diagnosing the lesion responsible for the abnormal cytology. Detailed analysis of the twenty-two cases in which the disagreement was not clinically acceptable demonstrated that conization showed the most serious lesion. In no instance was the diagnosis of frankly invasive carcinoma missed by the colposcopic examination. In ten cases cervical extension of the lesion made conization mandatory and in each of these cases the cervical conization revealed the most serious lesion. In three cases the colposcopic examination was negative and this also was an indication for conization. In the remaining eight conization cases colposcopic biopsy had not explained the severity of the cytologic findings. The other case of significant disagreement was a thirty-year-old patient with a Class II cytologic smear who was scheduled to undergo vaginal hysterectomy for uterine prolapse. Colposcopic biopsy performed prior to surgery revealed an area of leukoplakia which histologically proved to be metaplasia with minimal to moderate dysplasia. The final surgical specimen revealed a small area of carcinoma in-situ with a focal area of microinvasion. Cytology and colposcopy had both failed to reveal a significant pathologic alteration, probably due to the small size and endocervical location of the lesion.

Comments

It is universally accepted that cervical cytology is the best method to detect early cervical neoplasia. However, considerable controversy still exists as to the best approach to establishment of a definitive tissue diagnosis. Cervical conization has been an accepted technique. Some authorities recommend four quadrant biopsy with or without Schiller's test; the main objection to this method is the possibility of missing an invasive lesion. Cervical conization is an extremely accurate technique but it requires hospitalization of from two to three days and is an operative procedure requiring general anesthesia. In addition, complications such as bleeding, cervical stenosis, and infertility have been reported in 10 to 22 percent of patients by various authors.^{4,5} Our study agrees with recent reports that when colposcopy is available it is the logical first step in establishing a histopathologic diagnosis in

patients who have an abnormal cytologic smear.⁶ Cervical conization should be reserved for those patients in whom colposcopic examination has proved inadequate. This situation is likely to occur when the lesion extends into the endocervix beyond the view of the colposcope, in patients with an entirely endocervical lesion, and also in cases where there is lack of correlation between the colposcopic biopsy and the cytologic smear. Our experience agrees with reports that the need for conization can be reduced by eighty percent.

Our data on patients exhibiting a persistently Class II cervical smear indicates a high percentage of clinically significant lesions. It is fair to conclude that a persistent Class II cytologic smear as determined in our laboratory, not improved by local treatment of vaginitis, needs histologic confirmation by biopsy and that colposcopy is the ideal technique in these cases. If these patients were to be managed by conization in a hospital the financial burden would be unacceptable. We feel that the colposcopy clinic has become indispensable in the management of cervical neoplasia. It has greatly increased our ability to handle a large volume of patients exhibiting abnormal cervical cytology and we are now limiting conizations to those patients in whom colposcopy has proved to be inadequate.

We should never forget that cytology is a screening test that tells us that some abnormality exists. Colposcopy tells us where that abnormality is and whether or not conization is necessary; the biopsy verifies the extent of the abnormality.

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Diagnosis of Cervical Cancer in the Pregnant Patient

Byron L. Hawks, M.D.*

The keystone to the recognition and management of malignancy of the uterine cervix during pregnancy is basically dependent on a few easily accomplished clinical procedures. All pregnant women must have a cytological examination as part of the initial prenatal laboratory profile. All pregnant women must have the uterine cervix carefully visualized and inspected at the first prenatal visit. Interpretation of a classified Papanicolaou smear is to be made without reference to the pregnant state. A Class II, Class III or Class IV cytological cervical smear report in pregnancy has exactly the same significance as a smear taken during a non-pregnant interlude. Management of the classified Papanicolaou smear in the pregnant patient is identical with that of the non-pregnant patient.

A Class II smear should be repeated in four weeks following an intensive effort to clear up a vaginitis or cervicitis. Should a Class II smear be reported a second time then the patient requires a tissue diagnosis. This may be accomplished by Lugol staining and biopsy of non-staining areas. The procedure of choice is colposcopy and guided biopsy or most diagnostic of all, a cervical conization; however, this last procedure is scarcely ever warranted unless a colposcopically guided biopsy indicates the need for such a definitive and expensive procedure in the pregnant patient.

Class III and Class IV Papanicolaou smears call for an immediate reaction by the obstetrician and repeating such smears merely results in delayed definitive therapy. Again, the ideal response to these highly classified Papanicolaou smears should be a colposcopic examination and one or more guided punch biopsies. Conization may well be recommended in fifteen to twenty percent of cases after the biopsy reports are returned. Conization of the pregnant cervix is occasionally a hazardous procedure by reason of hemorrhage and the ever potential possibility of contributing to the onset of abortion symptoms. However, conization sometimes is imperative for the safe management of a given pregnancy. Conization of the cervix during preg-

nancy should be performed during the second trimester and is seldom indicated during the third trimester. Should the need for conization be absolutely imperative before obstetrical delivery and the pregnancy is too far advanced, then delivery should be accomplished by cesarean section and a conization performed late in the puerperium. This precaution is necessary if there is any question that invasive squamous cell carcinoma may be present.

Pre-Invasive Carcinoma of the Cervix in Pregnancy

Pre-invasive carcinoma of the cervix has been called carcinoma in situ or intraepithelial carcinoma, depending on area preferences. Regardless of terminology, what is meant is that a cellular abnormality exists throughout the entire layer of the stratified squamous epithelium of the cervix. This abnormality resembles carcinoma morphologically and does not progress beyond the basement membrane of the stratified epithelial layer. Cervical dysplasia involving less than the full thickness of the epithelium is described as slight, moderate or severe dysplasia.

All tissue reports of moderate to severe cervical dysplasia suggests the possibility of a co-existing pre-invasive or even invasive carcinoma of the cervix. A definitive tissue diagnosis must be established prior to delivery either by selective colposcopic biopsy or conization.

Vaginal delivery is permissible after a definitive tissue diagnosis of cervical dysplasia or carcinoma in situ has been established. Additional therapy, as indicated by the patient's desire for additional children and the extent of the disease process can be administered after postpartum involution of the pelvic organs. Therapy may be therapeutic conization, cryosurgery or hysterectomy.

If a hysterectomy and partial vaginectomy is planned, some patients have been treated by primary cesarean section and hysterectomy at term. Establishment of fetal maturity is critical; however, determination of the lecithin/sphingomyelin ratio in amniotic fluid has proved to be very accurate. This approach has obviated the inconvenience and expense of a second hospitalization. Concurrent stress urinary incontinence

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may be corrected by performance of a Marshall-Marchetti-Krantz urethrovesical suspension.

Invasive Cancer in Pregnancy

Invasive cancer diagnosed in pregnancy is managed with relation to the trimester in which the definitive diagnosis is made and desire of the patient for continuance of the pregnancy. During the first two trimesters, radium and x-ray may be the mode of therapy or a primary radical hysterectomy with node dissection may be employed. Of course, the therapeutic attack depends on the clinical staging of the disease. Invasive cancer diagnosed in the third trimester requires that consideration be given to the status of the fetus. As soon as the fetus is considered to be viable, a classical cesarean section should be performed followed by x-ray therapy and then radium applications in two sessions three weeks apart. In certain instances a radical hysterectomy and node dissection may properly fol-

low the classical cesarean section. The latter patients must be carefully selected and their disease process limited to the cervix and vagina.

Conclusion

A reproductive event often initiates a patient's first visit to a physician for a gynecologic examination. A cytologic examination from the cervix and vagina is an integral part of that examination. The only contraindication is active bleeding which obscures cytologic detail. Interpretation of a cytologic smear is not modified by pregnancy. Approximately ten percent of atypical or positive cytologic smears screened at the University of Arkansas Medical Center are from women age 21 or less. Recently a 15-year-old patient received a therapeutic conization as treatment for rather extensive carcinoma in situ of the cervix. Our high-risk patient population must receive cytologic screening regardless of age.



Dermatomyositis

K. Hashimoto et al (1030 Jefferson Ave, Memphis 38104)

Arch Derm 103:120-135 (Feb) 1971

Skin and muscle lesions of nine patients with clinically and histologically typical dermatomyositis were studied for the paramyxovirus-like inclusions previously described in several other connective tissue and autoimmune diseases. The detection rate of the inclusions correlated well with the degree of disease activity. The inclusions were cytoplasmic in small vessels of the skin lesions and could also be perinuclear in large vessels of the muscle. Tubules composing the inclusion budded from the wall of the endoplasmic reticulum or from nuclear membrane. No budding through the plasma membrane was observed. Uranyl acetate used in tissue stock staining increased the tubular density and ribonuclease disintegrated, though not completely, the tubules. An increased number of lysosomes in the inclusion-positive cells was associated with the vascular damage. Tissue culture studies and serological tests for several paramyxoviruses were negative.

Smoking and Cancer of Lower Urinary Tract

P. Cole et al (665 Huntington Ave, Boston 02115)

New Eng J Med 284:129-133 (Jan 21) 1971

Interviews were conducted with 470 persons with transitional or squamous cell carcinoma of the lower urinary tract, more than 90% of whom had a bladder tumor. These were a random sample of all such persons diagnosed during an 18-month period ending June 30, 1968, and residing in a designated area in eastern Massachusetts. An age- and sex-stratified, but otherwise random, sample of 500 persons drawn from the population of the entire study area were also interviewed as a control. Among men (controlling for occupational exposures) cigarette smokers have a relative risk of developing bladder cancer of 1.89 as compared with nonsmokers and about 39% of the disease is attributable to smoking. This amounts to 16.4 cases/yr/100,000 men aged 20 and over. Among women, the comparable figures are 2.0, 29%, and 3.9 cases/yr/100,000 aged 20 and over. For both sexes risk is increased among those who smoke heavily and those who inhale. No significant risk is associated with pipe or cigar smoking.

Cancer of the Cervix Uteri in Arkansas

Stephen K. Felts, M.D.,* Lucy R. Utterback,** and Reginald C. Ramsay, M.D.***

Between 1950 and 1967 the age-adjusted rate of death due to cervical cancer decreased nationally from 9.8 to 6.1 per 100,000 white females and from 21.7 to 16.1 per 100,000 females of other races.¹ Figures for Arkansas show a similar decline in mortality, but a distressingly large number of needless deaths due to cervical cancer still occur. Deaths from cancer of the cervix are preventable. Easily curable carcinoma *in situ* precedes development of invasive cancer, and the *in situ* stage is easily detected by routine Papanicolaou cytologic techniques. Identifiable epidemiologic factors, such as low socioeconomic status, early sexual exposure, multiple sexual partners, and ethnic group, provide indicators of those at greatest risk.^{2,3,4}

MATERIALS AND METHODS

The Vital Statistics Division of the Arkansas State Department of Health provided data on all Arkansas deaths from cancer of the uterine cervix for the year 1970 and 1971.

The Arkansas Cancer Registry provided data for all reported new diagnoses of cancer of the cervix for the 5-year period 1965-1969. The State Cancer Registry receives information, coded in a uniform fashion, on all cancer patients served by 12 general hospitals in Arkansas.* These hospitals account for approximately 40% of all hospital beds in hospitals of 50 or more short-stay bed capacity. The Veterans Administration Hospitals in Arkansas comprise about 50% of the non-reporting short-stay beds. Data from the 1970 U. S. Census were also used.

RESULTS

In 1970 there were 81 deaths due to cancer of the cervix in Arkansas compared with 97 in 1971. If we consider the population at risk to be all females over 20 years of age, the death rates from cervical cancer for 1970 and 1971 are 12.8 per 100,000 and 15.3 per 100,000 respectively.

More revealing, however, is an analysis of mortality data by race. Death rates for 1970 and 1971 per 100,000 white females were 11.4 and

12.6. For females of other races the corresponding figures are 19.7 and 29.6.

Table 1 shows the number of deaths and death rates by age for white and other Arkansas females for 1970 and 1971. These data reveal that mortality is not limited to the elderly; in the past two years there have been 44 deaths due to cervical cancer in women under 50 years of age.

Mortality data, while revealing our deficiencies in preventing cervical cancer deaths, do not show what we are accomplishing in Arkansas in early detection and treatment. Table 2 shows data from the Arkansas State Cancer Registry on *new cases* of cervical cancer and the stage of the disease at diagnosis. These data show that most cervical cancer in Arkansas is detected at an early curable stage; however, it also shows that the total rate of new cases for non-whites is 2½ times that for whites, and more significantly that the rate of cases which were far advanced at the time of detection was nearly 7 times greater for non-whites than for whites.

The limitations of these data should be recognized, however. Not all hospitals in Arkansas report cancer morbidity figures to the Arkansas State Cancer Registry, so the true rates for all categories are actually higher than those shown in Table 2, and true proportions of patients in each category are probably somewhat different.

CONCLUSIONS

Several inferences can be drawn. While we have made gratifying progress in early detection of cervical cancer, the disease still causes much unnecessary morbidity and mortality in our State. Both death rates and tumor registry data show that non-white females are at a greater risk of having cervical cancer and thus should receive special attention in our efforts at early detection and treatment. Pap smear screening should include all adult women, since there is a significant incidence of cervical cancer in younger women. Finally, studies by others have shown significantly increased incidences of cervical cancer among the poor and among women with multiple sexual partners. These groups also need special attention.

Periodic Pap smears are currently being provided by family planning clinics in local health departments for women unable to obtain such services because of low income or other reasons.

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In addition, 65 of Arkansas' 75 counties provide this test as a necessary requirement of family planning and maternity services. In 1971, a total of 12,376 slides were obtained; 40 were class III (*in situ*) and 16 were class IV (invasive cancer). Expansion of this program to include more women who are at greater risk and who are economically unable to obtain these services should help reduce our mortality rate for cancer of the cervix.

Efforts are being made to develop additional hospital cancer registries with statewide coverage and participation. An organization of Regional Cancer Registries, conforming to geographic boundaries recognized by the Economic Development Areas and Comprehensive Health Planning Program, is scheduled. With the present nucleus of data from 1935-1972 in the State Cancer Registry, this expansion will make possible statistically significant analysis of the epidemiologic aspects of cancer in Arkansas.

BRIEF SUMMARY

Between the years 1950 and 1967 a nationwide decrease occurred in the age-adjusted death rates due to cervical cancer from 9.8 to 6.1 per 100,000 white females and from 21.7 to 16.1 per 100,000 non-white females.¹ Figures for Arkansas show a similar decline in mortality, but a distressingly large number of needless deaths still

occur due to cervical cancer. Deaths from cancer of the cervix are preventable. Easily curable carcinoma *in situ* precedes development of invasive cancer, and the *in situ* stage is easily detected by routine Papanicolaou cytologic techniques. Identifiable epidemiologic factors such as low socioeconomic status, early sexual exposure, multiple sexual partners, and ethnic group provide indicators of those at greater risk.

Effort is being directed toward development of additional hospital cancer registries with statewide coverage and participation. The organization of Regional Cancer Registries, conforming to geographical boundaries recognized by the Economic Development Areas and Comprehensive Health Planning Program, is scheduled. With the present nucleus of data from 1935-1972 in the State Cancer Registry, realization of this expansion will make possible statistically significant analysis of the epidemiologic aspects of cancer in Arkansas.

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TABLE 1
DEATHS IN ARKANSAS DUE TO MALIGNANT NEOPLASMS OF THE CERVIX UTERI
(Number and Rate Per 100,000 Female Population Age 20 and Over)

AGE	1970		1971	
	WHITE No. (Rate)	OTHER No. (Rate)	WHITE No. (Rate)	OTHER No. (Rate)
20-24	0	0	0	0
25-29	2 (3.9)	0	2 (3.4)	0
30-34	1 (2.3)	0	1 (2.3)	0
35-39	2 (4.7)	1 (13.2)	3 (7.0)	2 (26.5)
40-44	4 (8.9)	0	6 (13.3)	1 (11.9)
45-49	8 (17.2)	1 (12.0)	9 (19.4)	1 (12.0)
50-54	7 (15.3)	3 (35.8)	5 (10.9)	3 (35.8)
55-59	8 (17.9)	1 (11.5)	5 (11.2)	4 (46.3)
60-64	11 (25.2)	4 (47.1)	13 (29.8)	6 (70.7)
65+	18 (16.6)	10 (42.5)	23 (21.3)	13 (55.3)
Total	61 (12.4)	20 (19.7)	67 (12.6)	30 (29.6)

TABLE 2
CERVICAL CANCER, RATE OF NEW CASES PER YEAR (AVERAGE 1965-1969)
BY STAGE OF DISEASE WHEN REPORTED

GROUP	STAGE OF DISEASE				
	TOTAL	LOCALIZED	REGIONAL	DISTANT	UNKNOWN
All Females	42.4	30.6	7.7	1.5	2.6
White Females	34.2	26.7	4.4	0.8	2.3
Other Females	86.3	51.5	25.4	5.4	4.0

Increasing Health Care Services through Expanding the Role of the Public Health Nurse in Medical Services to the Citizens of Arkansas

Eva F. Dodge, M.D., FACOG, FACS

There are many levels of nursing which give care to patients. These are the Registered Nurse, the practical nurse, and the aide or "office" helper, a woman who works in a physician's office and is trained by him to meet his needs, the physician being legally responsible for all her duties.

In addition to these levels of nursing care is the nurse clinician, who is prepared to render more complex services. This is a Registered Nurse who has received additional training in order to be able to provide emergency treatment and to diagnose certain diseases, and works under the supervision of a physician, not necessarily in the physician's office, but near enough to refer the patient for further diagnosis and treatment. She learns the necessity for "over" referral because her diagnostic training is limited.

There is another group, the Public Health Nurses, which has for years worked in communities giving health guidance and counseling. They have followed guidelines established by physicians for giving immunizations and care to ill patients in their homes. In the early days of the Public Health Nurse, their duties also included locating patients needing health care, bringing them to a clinic for diagnosis and treatment by the local physician. The physician personally gave the "shots" for immunizations or for venereal diseases, and, in the prenatal clinic, took the blood pressures and collected the blood for STS and Hgb.

Through the next years, more responsibility was delegated to the Public Health Nurse. These included urinalysis, taking blood pressures, and administering immunizations. Soon, there were "standing orders" for these nurses to follow when the physician was not present to supervise the individual treatments.

With the shortage of physicians since World War II, this phase of nursing care has become increasingly necessary, especially in non-urban

areas. These physician-shortage areas are ones where the nurse assistant can and does assume many of the treatments under physician direction, thus freeing his time for special examination, diagnosis and more complicated treatments.

For all patients to be protected, it is important that these nurse "assistants" recognize their limitations and perform within them.

Today, 1973, we are reaching another milestone in patient health care. The rapid change in functions of nurses, especially in Public Health, is evident. Over a period of years, in some Public Health Clinics, the nurse has been given responsibility for taking the medical history of the maternity, family planning patients and well-baby cases. This gives the patient more time to think through and discuss the important aspects of past illnesses, and allows the physician more time for complex treatments and for seeing greater numbers of patients.

Other responsibilities the Public Health Nurse has been given are to collect blood for STS and hemoglobin. In some Family Planning Clinics in Arkansas, the Public Health Nurse takes the Pap smears and GC cultures, while the clinician performs the bimanual pelvic examination on all new patients and those returning for an annual examination.

Another extended health service the Public Health Nurse can adequately perform is breast examination and teaching women techniques of self breast examination. In certain Public Health Clinics, the nurse checks all new patients and patients returning for an annual examination for breast abnormalities. Those patients whom the nurse suspects may have a breast abnormality are further examined by the clinic physician.

What does need more emphasis is the teaching of self breast examination to all women in the child bearing age. Women are the first line of defense in prevention of cancer of the breast, as 90 percent of tumors of the breast are found by the woman herself. The younger a woman is taught self breast examination, and the im-

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portance of doing it every month, the better this habit will be established for her later years when breast cancer is more apt to occur.

The Public Health Nurse can fill a vital role in these extended services with appropriate training. The Public Health Nurse is taught to do Pap smears and GC cultures, to observe the external genitalia, to recognize normal variations of the labia, clitoris and vaginal outlet as well as cystoceles, rectocyles, lacerations and erosions of the cervix. The technique of speculum insertion, with only water for a lubricant, is demonstrated and practiced on several patients under direct supervision of the family planning physician consultant. Observations of the cervix, lacerations, erosions, and other abnormalities are made. Techniques of obtaining Pap smears and GC cultures are demonstrated and practiced. Techniques of removing the vaginal speculum with as little discomfort as possible are taught.

We recognize that examination of a normal breast takes time as does obtaining a Pap smear and GC culture. These are technical procedures. By instructing and then delegating activities such as these to the Public Health Nurse who has demonstrated her competency, the physician is allowed more time to counsel the patient on her choice of contraceptive prescribed and to examine all new and returning annual visit patients.

The necessity for a second preparation for a pelvic examination is a disadvantage, but this must be weighed against the value of more time for patient counseling and a greater volume of patient visits.

The number of new patients in family planning is increasing each year and, as a result, the number of continuing patients increase yearly. The number of clinicians available is not increasing. It is imperative that much of the patient care be delegated to the Public Health Nurse under the supervision of the clinicians.

What is the future role of the Public Health Nurse? Only 40 percent of the target population in the Eastern Arkansas Family Planning Project of seven counties has been reached in three years. What of the other 60 percent? Can we expect the present number of clinicians to care for these patients with no increase in the number of clinicians, clinic sessions or of Public Health Nurses?

If medical students can be taught the techniques of bimanual examination in the three

weeks of clinic time allotted in the present medical schools to OB/Gyn, cannot the Public Health Nurse be taught to do bimanual examinations as a screening measure to help the clinicians in the annual examination of patients? By "over" referral of these patients there should be no more "missed" pelvic pathology than with NO pelvic examinations! Every-other-year pelvic examination (bimanual) by the physician and examination of those with any variation from normal referred by the Public Health Nurse at a yearly visit will give these patients as good health care as some private patients may be receiving.

It is the opinion of this author that teaching of self breast examinations, taking Pap smears and GC cultures by the Public Health Nurse will provide better health care by reaching more patients and allowing the physician more time to care for complex medical problems.

At the present writing, all of the Public Health Nurses in the seven counties of the Eastern Arkansas Family Planning Project have had special training in taking Pap smears and GC cultures and in teaching self breast examinations. A number of the Public Health Nurses in other counties have also been trained and authorized to do these examinations.

Clinical workshops on extended role of nurses in health care, have been held for the 200 Public Health Nurses in the State. Plans are being made for the fall of 1973 to extend this training through inservice education as was done in the pilot training program for Public Health Nurses of the Eastern Arkansas Family Planning Project.

Only the additional responsibilities now delegated to the Public Health Nurse in the area of family planning have been discussed in this paper. Similar programs are being started to extend the role of the Public Health Nurse in the physical assessment of children and in selected areas of Tuberculosis Control.

Currently there is a Public Health Nurse in each of our 75 counties. Before 1973 is over, it is hoped that all of the State's 200 Public Health Nurses will receive training in techniques of teaching self breast examinations, taking Pap smears, GC cultures, the physical assessment of children, and in Tuberculosis Control in selected areas. This should make better health services more readily available to the citizens of Arkansas than has been possible in the past.

Human Values and the Quality of Survival**

Linda Rickel, R.N.*

When asked to speak at the 9th Annual Cancer Workshop for Nurses on Uterine Cancer, I was hesitant to accept the challenge mainly because as the Oncology Nurse at the Veterans Hospital, we see very little uterine cancer. Then the subject was brought up that I could speak on human values and the quality of survival. Again I hesitated. What are human values? And what do we mean by the quality of survival? Values as described in Webster's Dictionary is the quality or the fact of being excellent, useful or desirable. It's the worth in anything or in anyone. The word, human, simply means belonging to or relating to man and how we relate our worth to ourselves. How we value ourselves becomes all important. And, how a female values herself becomes utmost in the early diagnosis of uterine carcinoma.

People for generations have put a value on human life. In some societies the elderly are "valued"; in others they are not. In some countries human life is very cheap; in others it is not. All of us have our own "value" of each human in our contact. We can't put a dollar value on life. An excerpt from an editorial in a medical journal was handed to me the other day which sums up my concept of the value of life.

"The sanctity of life is a concept that affirms that the value of human life is infinite and beyond measure, so that any part of life — even if for only an hour or a second — is of precisely the same worth as seventy years of it, just as any fraction of infinity being indivisible remains infinite."

But, today along with human values we are talking about cancer. Cancer has been with us for decades and still the fears that plagued us long ago remain with us. So often, cancer to many people means a death sentence or they have heard of Aunt Judy who had a cancer and suffered a horrible death.

Search your own soul and experiences. Did Grandpa die of cancer, was that neighbor's child taken so tragically with cancer? Do I remember the feeling when they told me *I* had cancer? All

this is related to that one word "Cancer". How can we alleviate these fears—or can we? Through early diagnosis we feel that these fears *can* be alleviated. The only way nurses and doctors can help cancer patients become educated about their disease is if they themselves learn about that particular cancer. All too often what we know about cancer is what we learned 5 or 10 years ago and that no longer holds. But, until people go to their doctors when they notice the first of cancer's seven warning signals, until people report for regular checkups and until women insist on not being overlooked and given Pap smears, we're not going to be able to alleviate the fear nor the disease. Early diagnosis brings me into my next subject "quality of survival." Because an early diagnosis can mean a "better quality of survival."

This is shown in any figures that you would like to pick up. For instance in uterine cancer, five year cure rates differ so much according to when diagnosis was made. If caught early, there is a 100% survival rate. This is in stage zero, where a Pap smear may come back positive or a carcinoma in situ is diagnosed. We've discussed Pap smears, uterine cancer, and the fact that this is one disease that can be alleviated by early diagnosis. A stage one cancer (confined to the cervix) is still very treatable and prognostically good — 74% rate of survival. A stage two is not an early diagnosis (where the cancer extends outside of the cervix but does not involve the pelvic wall or the lower third of the vagina). But these people have a greater than 50% chance of being cured. But, then what happens? As precious time marches forward, the cancer continues to grow. Delay in diagnosis until a woman has reached a stage three (spread into the pelvic wall and vagina) gives that person less than 30% chance of a five-year survival, and chances are the quality of that survival will be poor. Surgical control is less possible. The cancer involves areas of the body which will produce increased suffering and will require extended, complicated and often unpleasant treatments.

It is sad but we must mention the stage four (which involves the rectum, bladder, and distant metastatic spread) because only 8% of them sur-

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**Presented at the Annual Cancer Workshop for Nurses, June 5, 1973, Camelot Inn, Little Rock, Arkansas.

vive five years. It is needless to go into detail about their quality of survival.

Even with these figures do we fully comprehend what we mean by "quality of survival." *Quality* is a characteristic, a distinctive trait, a fine attribute. Longevity is not the only aim of cancer detection and cure but also the quality of that survival. We all prefer to live with dignity and respect — not merely to exist. No one would argue the fact that to live a pain-free, useful, contributing life would be the goal of us all. The diagnosis of cancer does not need to take that from us. By early diagnosis, stage 0, a woman can be assured of "cure" and an excellent quality of survival.

As stated before — even if a woman with stage 3 or 4 cancer of the uterus beats the statistics and "lives" five years — what quality of survival would that be — painful? bedfast? dependent on others? It is up to us to educate the public, not only on cancer treatment but what quality of survival we can anticipate with early diagnosis.

Even when the statistics and the facts I have spoken about are put before people, they often say, "I would rather live without knowing that I have cancer than to know it." So often the feeling is of helplessness and as Barkley said in her article on families facing cancer, "To feel helpless about an illness is many times worse than the illness itself." This is so often true because people are not educated in what can be done, what should be done and what will be done if diagnosed early. People must learn to speak of cancer like they would of any chronic disease. We talk openly of diabetes among our family and friends, and when someone is diagnosed with diabetes we no longer have that extreme fear and dread of the disease, although people still die from diabetes. However, there are many more who, with proper treatment, are living full useful lives. And, what about heart disease? It still is our number one killer. But people are not ashamed to talk about the fact that they have heart disease or their mother has heart disease. Still, when the word cancer is presented to them, fear creeps in.

So many patients I see each day talk about their fears of cancer. Through patient teaching they become less fearful and more cooperative as they learn more about their disease. Even if the prognosis is extremely poor, as unfortunately

it still is in many cases, people that are free to talk about the disease find it is comfort. Medical personnel are often guilty of shutting out patients with cancer because they themselves do not feel comfortable talking about it.

Although not asked to speak on emotional aspects, we cannot fully discuss human value, quality of survival, or cancer without understanding a little of why people react the way they do. As an Oncology Nurse, I constantly deal with cancer patients. Many I follow from the time of diagnosis till their demise. Often I see far advanced disease where chemotherapy is the only course of treatment left open to them but they still react — quietly or violently, they all react. By understanding how patients react to a diagnosis of cancer we may better be able to meet their needs. Although emotional and psychological aspects accompanying a diagnosis of cancer could offer material for a complete workshop, I would like to mention them briefly. As nurses who work with patients continually, a little insight into how they react and understanding that the reactions are normal will help us in identifying these emotions.

Irrespective of the stage the cancer is in when diagnosed, a person will react in many ways. His reaction will be determined by three main things.

- I) Personal characteristics (Values)
 - a) How he views himself
 - b) How he views his family
 - c) How he views the medical personnel
- II) Interpersonal relationship
- III) Nature of the illness (Quality of Survival)
 - a) Rapid or slow
 - b) Lost functions — physical and emotional

In dealing with cancer of the uterus we can relate these feelings specifically to that diagnosis. How a woman views herself, her relationship to her family, and how she reacts to the medical personnel will help us recognize her response to her diagnosis. If she is a young wife and desires to have children she may react more violently than a woman who has already raised her family. She may suddenly feel undesirable to her husband and unable to offer him a "complete" woman. She may feel as a burden to him — financially and physically. How she views her "value" to her family is a very important factor. This same young woman may not feel or relate the same way if her diagnosis is given to her by an elderly male doctor in comparison to a young

female doctor. All these things must be considered.

If we can happily tell her that it has been diagnosed early so that the nature of her illness will be less futile we will not only make her future more pleasant but wouldn't it help us — the medical personnel? It is always easier to give pleasant rather than tragic news.

How the woman copes with her diagnosis is better understood if we are aware of the coping mechanisms most often used. They are:

- 1) Denial — a patient's refusal to admit the truth.
- 2) Pseudo-denial — Denial for someone else's benefit.
- 3) Regression — Withdrawal or return to infantile objects of attachment.
- 4) Intellectualism — The doctrine that knowledge is derived from pure reason. (The patient that uses intellectualism is practicing a form of denial. He has read everything available to him on his disease and is well versed on all aspects of his diagnosis. Although he experiences all the signs and symptoms of his disease entity he often rationalizes that he will be among the statistics that survive.)

In my work with cancer patients I see these mechanisms used everyday. They are a necessary part of the patient's ability to work through a difficult situation. They should not be taken away from him — neither should they be catered to. A firm, positive, realistic approach should be used.

A diagnosis of cancer also allows many emotions to surface. Anger, shame, guilt, grief and depression seem to accompany a diagnosis of cancer. The woman with cancer of the uterus usually shouts in anger "why me" or guiltily says "if I'd only had my check-up sooner," or shamefully says "I'll not be a woman again." Grief and depression may overtake their lives by the loss of a body part, their womanhood, their future.

We again can alleviate this by proper education. We must help people to accept the fact that cancer is with us. Statistics show that one out of four persons will live, have had or have cancer at this very minute. One out of four of us will die of cancer by 1980. We must accept that cancer is here, that there are possibilities

for rehabilitation and cure and that by meeting cancer early, we can treat it successfully and alleviate this fear that so many people have. Many people even after they have a diagnosis of cancer, refuse treatment, refuse to follow doctor's advice, and often just go home to die. We can no longer let this type of idea progress in our society. "The more we are aware of the cancer patient and his needs, the more likely he is invited back to life."

Unfortunately, as we mentioned previously, all cancer patients do not have the prognostically good outlook as uterine carcinoma victims do. But, we still can improve the "quality" of their survival. The cancer patient, even in very far-advanced disease, needs to feel that he can contribute something if it is only his presence with his family.

Understandably this is a critical and emotionally charged time for the family. They are often torn between loyalty to the patient and fear of being unable to care for him adequately. In our program at the Veterans Administration Hospital we strive to maintain the patient's independence and afford him the opportunity to remain with his family whenever possible. Continual hospitalization when the disease becomes advanced until death is not the answer. Neither is the attitude that so many medical personnel have of "we've done all we can" and shunning the patient. Have we done all we can?

By individual and family teaching, the patient can remain at home in familiar surroundings. Many families when given adequate support, emotional, financial and medical, prefer it this way. This can alleviate the guilt families often face when they feel it is necessary to "abandon" their loved ones at hospitals when they need them the most.

By working closely with families, by educating them to possible emergency situations and how to cope with them, and by being available when they do need you, enables the patient to enjoy his last days, enables his family to contribute to his care, and offers a better quality of survival.

The more we are aware of the cancer patient and his needs, the more likely he is invited back to life.

We have the diagnostic tools, we have a cure for uterine cancer. We can offer an excellent quality of survival. It is up to us as nurses, up to us as men and women, and up to us as human beings to project the idea that cancer is not

always a terminal disease. We do have human values and want an "excellent quality of survival." Let's begin treating cancer as a chronic disease, not a terminal one. Let's wipe out uterine cancer now!

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Kveim Reaction to Lymphadenopathy in Sarcoidosis and Other Diseases

H. L. Israel and R. A. Goldstein (Thomas Jefferson Univ Hosp, Philadelphia 19107)
New Eng J Med 284:345-348 (Feb 18) 1971

Kveim tests in 37 selected patients with sarcoidosis demonstrated that the reaction was related to persistent lymphadenopathy and not to duration or activity of illness. Fourteen asymptomatic patients with marked mediastinal and hilar node enlargement of long duration all reacted strongly. Positive tests occurred in only three of 12 patients having disease of recent onset with minimal adenopathy, and in only one of 11 patients with active hepatic or cutaneous sarcoidosis and normal chest roentgenograms. The demonstration that the Kveim reaction is more closely related to lymphadenopathy than to granulomatosis led to tests in patients with lymph node enlargement due to other diseases. Typical reactions were obtained in patients with chronic lymphatic leukemia, tuberculous adenitis, infectious mononucleosis, and nonspecific cervical adenitis. The Kveim test appears to be an immunologic reaction associated with persistent lymphadenopathy of diverse causes.

Cysts of Sella Turcica

E. L. Weber, F. S. Vogel, and G. L. Odom (Duke Medical Center, Durham, NC)
J Neurosurg 33:48-53 (July) 1970

Various types of non-neoplastic cysts were found in the sella turcica. Three case histories and the histological material seem to indicate progressive intermittent infarction of the adenohypophysis may lead to the formation of some of

these cysts. The cysts described contained brown "motor oil-like," cholesterol-containing fluid sometimes thought to be characteristic of craniopharyngiomas, but no tumor tissue could be found and there has been no recurrence of the lesions in up to eight years after subtotal resection. These lesions have been confused with craniopharyngiomas in the past but should be recognized as a separate entity. Wide surgical drainage appears to be adequate treatment and complete resection is not necessary. Rupture of these cysts through the diaphragm of the sella would seem to be a possible etiology for the so-called "empty sella syndrome."

Reversibility of Malignant Hypertension

G. Pickering (Pembroke College, Oxford, England)
Lancet 1:413-417 (Feb 27) 1971

Three patients who had extremely high arterial pressure, fully developed neuroretinopathy and arteriolar necrosis in kidneys and adrenals are described. Arterial pressure was reduced in all patients by surgery, retinopathy was resolved, and the patients survived for six years. Primary lesion was pyelonephritis in all three patients. One patient died of cerebral hemorrhage, possibly from a Charcot-Bouchard aneurysm, after nine years. Two patients survived 24 years after the malignant phase, one having had a myocardial infarct at age 37. Where pressure is reduced, the fibrinoid deposit in the arterial wall is quickly reabsorbed. These case histories show that when the pressure remains only moderately elevated, fibrinoid necrosis of arterioles does not recur, at least in 24 years.

Description Versus "The Number Game"

William E. Harville, M.D.*

The emergence of a more analytic quantitative synthetic approach to human disease conceived in a framework of molecular biology with the penultimate being a mathematical expression or number has at times intimidated some of us brought up intellectually in more descriptive days. Consequently we have come to revere "the number" often without thinking of how the number is derived and whether the number is a "good" number or "bad" number.

This problem is very apparent in reporting cervico-vaginal preparations. Historically,¹ Dr. Papanicolaou, in the 1940's wrote his reports in long hand and attached them to the request form; the final report was typewritten on separate gummed sheets and attached to the patient's chart. Since many specimens were similar, standard descriptions became useful and eventually the practice of merely checking off the appropriate phrase emerged. These phrases were num-

bered to simplify clerical tasks in teaching and to facilitate statistical summaries. Recently, there has been a critical attitude toward the "numbers game" in cytologic literature.² Consequently, the clinician may be faced with a variety of reporting habits.

At the spring meeting of the Arkansas Medical Society, the Pathology Section reviewed the results of a questionnaire previously mailed them covering reporting habits of cervico-vaginal cytologic specimens. It is of interest that no laboratory responding reported results using Roman numerals alone. In nearly every case narrative reports were used with appropriate comments concerning further care. In the following chart the phraseology used to define the usual "Pap Classes" is at the left; the survey results are in the middle and right columns. It should be pointed out that when pathologists use "biopsy" they usually mean biopsy of a clinically obvious area of disease in which a conization might be unnecessary. Furthermore, when Arkansas Path-

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Validity of Plasma Catecholamine Estimations

M. Carruthers et al (W. Somerville, Middlesex Hosp, London)

Lancet 2:62-67 (July 11) 1970

Potential sources of error in plasma catecholamine measurements were investigated and were found in the collection, storage, and estimation of samples. To reduce the chance of error, blood samples should be taken as quickly as possible and the plasma separated and frozen immediately, the exact time being recorded; small delays at this stage cause important losses of catecholamine content. Significant losses also followed prolonged storage of frozen plasma samples and repeated thawing and refreezing. Venepuncture can raise the blood catecholamine content; when multiple estimations are necessary, samples can be taken through an indwelling venous catheter. This procedure does not affect catecholamine content of the specimen. Certain drugs and bev-

erages may interfere with the biochemical method of catecholamine estimation.

Gastric Secretory Response to Head Injury

L. Norton and B. Eiseman (Denver General Hosp, Denver)

Arch Surg 101:200-204 (Aug) 1970

Ten of 19 patients, comatose following severe cerebral trauma, showed evidence of gastric acid hypersecretion within the first week posttrauma. Three bled briefly from presumed stress ulcer. Hypersecretion was reduced in three patients after administration of parasympatholytic drug. Acid hypersecretion occurred both in patients with and without adjunctive corticosteroid therapy. The "Cushing's ulcer" appears to differ from other forms of stress ulcer in having a higher incidence of associated gastric hyperacidity. Neostigmine bromide, pilocarpine, hydrochloride, vitamin A, and phytohemagglutinin failed to stimulate mucus secretion when used in gastric pouches.

ologists say “cone” they mean—cold-knife conization.

SUMMARY

The use of numbers alone was discouraged by the Arkansas Society of Pathologists; numerical suffixes were deemed useful for short-hand communication and statistical studies in computerized reports. Good honest description of the findings was generally preferred to a highly structured number system as IIIa, IIIb, or IIIc.

Finally, adequate histopathological examination is the final arbiter of cervical lesions when evaluating cervical vaginal cytology.

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ARKANSAS PATHOLOGICAL SOCIETY SURVEY RESULTS

Pap Classes	Phrase	No. of Labs	Comments
I	No abnormal or malignant cells seen; or, no cytologic evidence of a malignant neoplasm found	14 Labs	2 Labs — Routine check annually if less than 35 years; semi-annually if greater than 35 years
II	Atypical cells present probably due to inflammation Class II with comment and description Atypical cells seen	11 Labs	8 repeat after treatment or in 3-4 months 3 Labs — Routine check as above 1 Lab — If endometrical cells present after day 13 or cycle, repeat 1 Lab — Specific date to re-examine
III	Cells suspicious for malignancy Class II or III please repeat Class III with comment “compatible with dysplasia; carcinoma insitu cannot be ruled out” Suspicious for malignancy Dysplasia with degree of dysplasia	9 Labs 1 Lab 1 Lab 1 Lab 1 Lab	2 Labs suggest cervical biopsy 8 Labs suggest multiple biopsy or conization 1 Lab suggest repeat and/or conization 1 Lab — repeat with conization if still dysplastic
IV	There is fairly good evidence of a maglignant neoplasm Combine III and IV into III Probably malignant Probably malignant carcinoma in situ or invasive carcinoma	 10 Labs 1 Lab 1 Lab 1 Lab	12 Labs recommended multiple biopsy or conization 1 colposcopy indicated
V	Cytology strongly suggestive of malignancy Carcinoma in situ or invasive carcinoma Do not use the catagory class IV Malignant cells seen	10 Labs 1 Lab 2 Labs 1 Lab	6 Labs recommended biopsy 3 Labs recommended conization 2 Labs recommended conization or biopsy

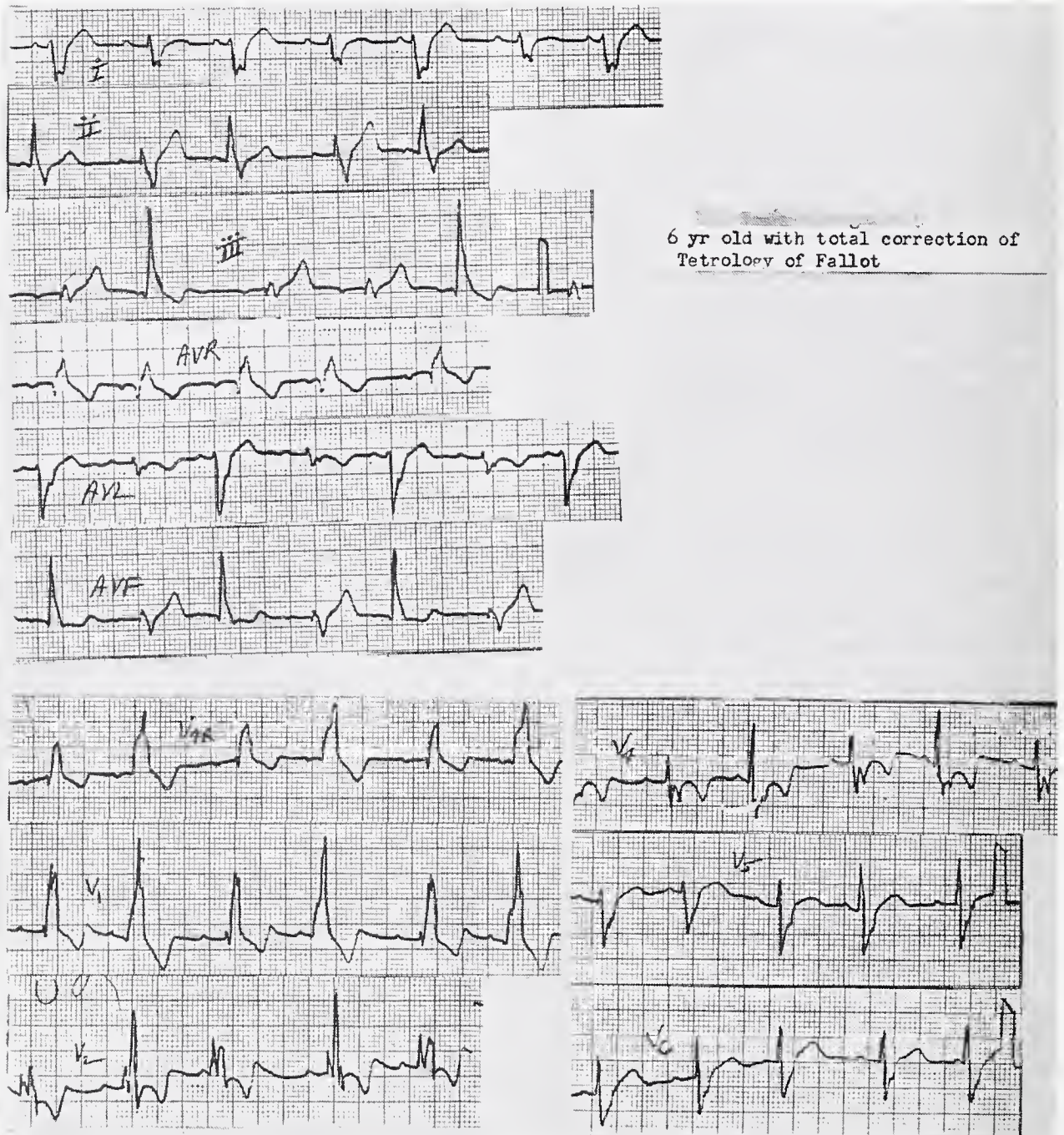
ELECTROCARDIOGRAM



OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 225)



John E. Douglas, M.D., Assistant Professor of Medicine
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Emergency Medical Equipment and Supplies Will Stay in Arkansas

Jack Cottingham*

The use for the packaged disaster hospitals came about in the 1950's as a civil defense tool to be used in case of nuclear war. This period was a time of tension in the world when perhaps some incident could have triggered an exchange of nuclear weapons.

It has been estimated that in an exchange of nuclear weapons approximately 60 million Americans would be killed and 30 million more would require emergency medical treatment. The 200-bed packaged disaster hospital (PDH) was designed to replace the medical facilities that surely would be obliterated in many places should an attack occur.

The hospital contains 660 cases weighing in excess of 44,000 pounds and requires 7,200 cubic feet or 1,200 square feet of storage space. Refrigeration (33 cubic feet) and heated storage (350 square feet) is required for protection of certain drug items. The unit, when set up, requires 15,000 square feet of floor space to establish and operate the following services: monitoring and decontamination, admitting and sorting, surgery, X-ray, clinical laboratory, pharmacy, central supply, wards, mortuary services and dental care.

The hospitals are pre-positioned strategically in the states according to certain Federal-State criteria.

The PDH maintained its identity as Federal property even though local hospital administrators agreed to affiliate with the program. It is the communities' responsibility to make plans for setting up, staffing and obtaining supportive services for the operation of the units should any type of disaster occur. The most logical plan of utilization is to augment existing hospital facilities or establish the PDH in a pre-selected building such as a school.

A secondary mission of the PDH is to provide the necessary medical service during or after a major natural disaster. As a matter of information, since the hospitals have been stored in Arkansas, 1958 to date, component parts from at least two or three hospitals have been used during the tornado seasons. During this past year portions of the hospitals in Harrison, Jonesboro, Paragould and Helena were used because of tornadoes or floods. Permission for use of a PDH in a major peacetime disaster must be obtained from the Arkansas Department of Health, Emergency Health Services Division, Little Rock, Arkansas.

In conjunction with the PDH Hospital Reserve Disaster Inventory (HRDI) units were established as a back-up for regular hospital medical supplies. These 50, 100 and/or 200 bed units of drugs are placed in a community hospital inventory and rotated through day-to-day use of the pharmaceutical supplies.

The latest Federal policy indicates that the PDH Program has served its purpose and should be discarded. This policy is not concurred by all echelons of government. Nevertheless, the Federal government did announce at the beginning of the year that the program would be phased out by July 1, 1973. The New York Times reported that H.E.W. was abandoning the program as an economy move and according to Dr. Huntley, former Director of the Emergency Health Services Division, the more than 2,000 packaged disaster hospitals throughout the nation cost about \$8 million a year to maintain and supervise.

The hospitals were disposed of in several ways; some of the states' agencies accepted the program, they were given directly to the affiliated hospital, or turned in as surplus property and in one instance approximately 100 were transferred to

*Arkansas State Department of Health, Division of Public Health Education, Little Rock, Arkansas 72205.

the AIDE program.

Here in Arkansas, the Department of Health

has signed for all of the 18 packaged disaster hospitals and 42 hospital disaster reserve inven-

HOSPITAL RESERVE DISASTER INVENTORY LOCATIONS



Benton County — 2 units
 Washington County — 2 units
 Crawford County — 1 unit
 Yell County — 1 unit
 Garland County — 2 units
 Hot Spring County — 1 unit
 Hempstead County — 2 units
 Nevada County — 1 unit
 Columbia County — 1 unit
 Union County — 1 unit
 Dallas County — 1 unit
 Saline County — 1 unit
 Pulaski County — 5 units
 Faulkner County — 1 unit
 Conway County — 1 unit
 Pope County — 1 unit

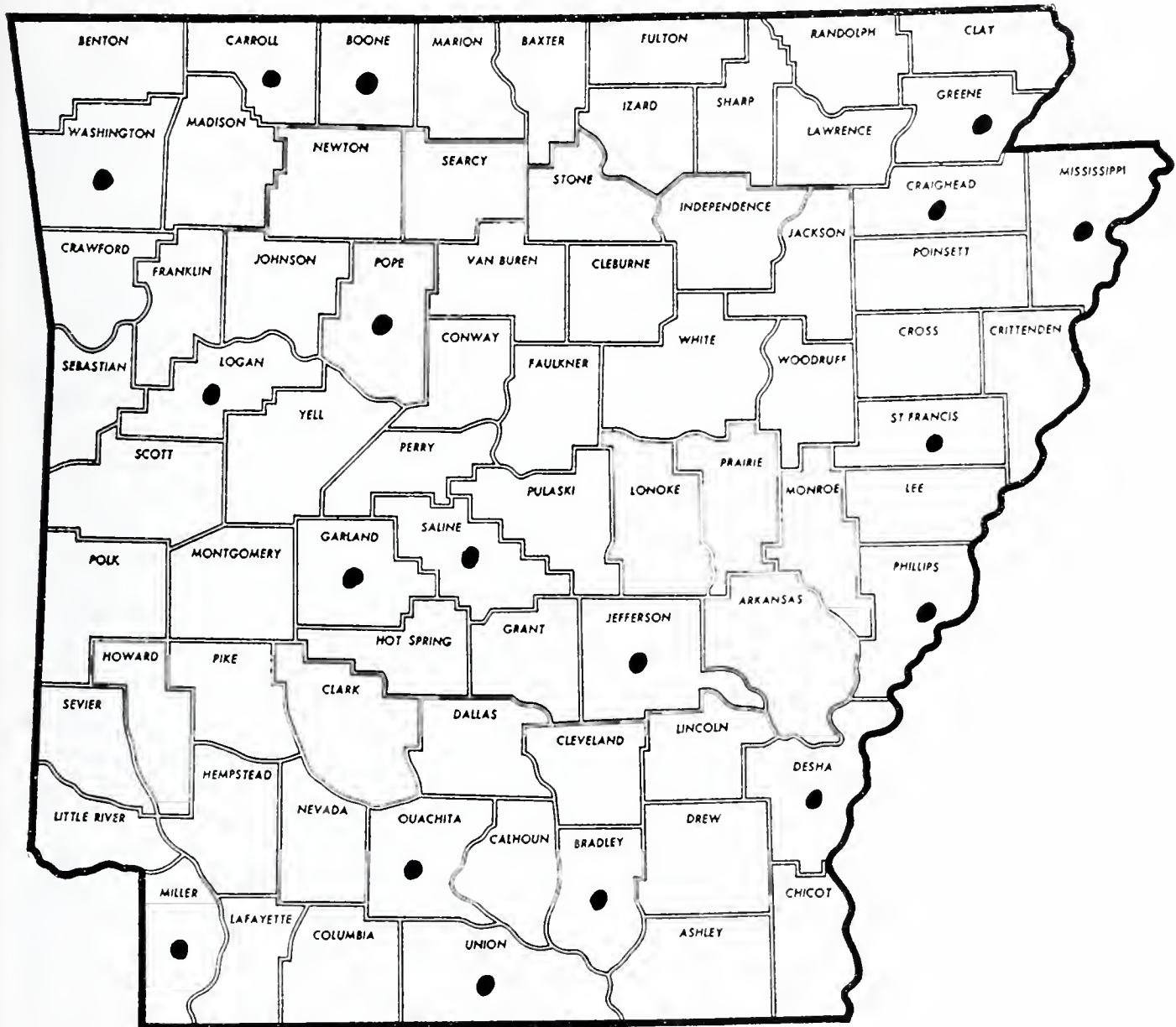
Marion County — 1 unit
 Baxter County — 1 unit
 Fulton County — 1 unit
 Lawrence County — 1 unit
 Greene County — 1 unit
 Independence County — 2 units
 Cleburne County — 1 unit
 Jackson County — 1 unit
 White County — 2 units
 Cross County — 1 unit
 Crittenden County — 1 unit
 St. Francis County — 1 unit
 Monroe County — 1 unit
 Arkansas County — 1 unit
 Drew County — 1 unit
 Chicot County — 1 unit

tory units with plans to leave them where they are presently stored and continue the program under State authority instead of Federal. Arkansas consistently has been rated in the top five among all other states in the performance of the program and with the same personnel will continue to provide this level of service.

This service consists of performing inspections on both the PDH and HRDI units at least twice

each year, maintaining inventories and assisting with individual problems when required, counseling local authorities on storage areas, rodent control, etc., assist the communities in developing emergency disaster plans and provide materials and instruction for classes in Medical and Self-Help courses. The above programs are the responsibility of the Emergency Health Services Division, Arkansas Department of Health.

PACKAGED DISASTER HOSPITAL LOCATIONS



Benton-Saline County
 Berryville-Carroll County (storage only)
 Blytheville/Osceola-Mississippi County
 (stored at Luxora)
 Camden-Ouachita County
 Dumas-Desha County
 El Dorado-Union County
 Fayetteville-Washington County
 Forrest City-St. Francis County
 Harrison-Boone County

Helena-Phillips County
 Hot Springs-Garland County
 Jonesboro-Craighead County
 Paragould-Greene County
 Pine Bluff-Jefferson County
 Russellville-Pope County
 Subiaco-Logan County (storage only)
 Texarkana-Miller County
 Warren-Bradley County



EDITORIAL

Uterine Cancer Task Force**

Ruth C. Steinkamp, M.D.*

The American Cancer Society is launching a four-year nation-wide task force to reduce the toll of cervical cancer by earlier detection. The theme is: "Let No Woman Be Overlooked." The established goal is "A Pap test by 1976 for every woman 20 years or older to whom the test is applicable and for younger women at risk."

Fourteen years ago, Doctor A. S. Koenig discussed mass cytological screening for cervical cancer in Arkansas.¹ He concluded the manpower and facilities then available were not sufficient to accomplish this for all women at risk. He recommended development of regional cytology laboratories, use of cytotechnicians for screening with certain established supervision by pathologists, and the maintenance of the doctor-patient relationship.

Fourteen years later, we may be ready to undertake this as a statewide and a nationwide effort. The far-sighted suggestions of Dr. Koenig have indeed been established. The American Cancer Society Task Force is not a crash program, but one which in my estimation will have a significant effect on mortality in the United States and in Arkansas from cancer of the cervix. This cancer, as you are keenly aware, can be diagnosed in a non-invasive stage at which time appropriate treatment can afford a normal life expectancy.

How do we rate in Arkansas in the incidence of and mortality from cancer of the cervix? During the 5 year period 1965-69, the Arkansas Cancer Commission acceded to the Tumor Registry 913 new cases in white women and 431 new cases in non-white women, or a total of 1,344 cases.² This is an average of 269 cases per year. Of

these 83% of white women and 62% of non-white women had localized disease at diagnosis. The remainder had more extensive disease.

During this same time period in Arkansas, about 90 women per year died of causes directly attributable to cancer of the cervix.² This figure becomes more meaningful when we compare Arkansas' experience with that of the United States and the states surrounding Arkansas. The latest available age specific death rate for all women in the USA is 9.3/100,000, in Arkansas 11.9/100,000.³ We are ninth from the highest for all the states and the District of Columbia. By race, the USA death rate from carcinoma of the cervix for white women is 8.5 as compared to 10.2/100,000 in Arkansas (or 8th from the highest). For non-white, we are a little better or 11th from the highest with 17.8/100,000 as compared to 15.8 for the USA as a whole. Of the six surrounding states to Arkansas, only Oklahoma has a higher mortality rate than Arkansas for white women. Only Mississippi and Missouri have higher rates for non-white women.

Louisiana, 25th from the top for mortality in white women and 15th from the top for non-white women, has taken a unique step. Orleans Parish Medical Society, so far as I know, is the only medical society to pass a resolution endorsing the widest possible use of cervical cancer screening.⁴ The resolution adopts screening as a sound health practice, encourages physicians to offer their patients annual screenings if not contraindicated and encourages medical staffs of public and private hospitals to adopt as policy assurance of annual screening for all adult female patients both in- and out-of-hospital. A medical-legal opinion of this resolution has been written by H. B. Alsobrook, Jr.⁵

How does Arkansas rate in the use of the Pap

*Ruth C. Steinkamp, M.D., is chairman of the Steering Committee for the Uterine Cancer Task Force of the Arkansas Division, American Cancer Society, Inc.

**Presented to the meeting of the Council, Arkansas Medical Society, December 3, 1972, Sheraton Hotel, Little Rock, Arkansas.

smear? This is difficult to determine. National estimates indicate only about 50% of women at risk have ever had a Pap smear. In 1963 this was only 15%. An informal survey I conducted with several pathologists in the State would indicate Pap smears are provided in one year equal in number to about 50% of women over 20 years of age. Arkansas pathologists also tell me their output with present facilities and technicians could be increased by 50-100%.

About three years ago, the Academy of Family Practice conducted a campaign to increase the use of Pap smears in the USA.⁶ Many of you participated in this effort. Over a million Pap smears were reported to the study during its 3-year course. It was estimated 1/3 of the over 13,000 suspicious tests reported were first Pap tests.

As you know, the family planning program in Arkansas is providing Pap smears to every woman who participates. There is no doubt but that the usage of Pap smears in Arkansas has increased as a result of these two programs.

The Arkansas Division of the Cancer Society through its Steering Committee on the Uterine Cancer Task Force plans for the next four years a program which we hope will result in an increased usage of Pap smears and ultimately a decrease in our mortality experience from cancer of the cervix.

The several aspects of the program are: analyze, organize, promote and educate and finally, evaluate.

I would like to touch briefly on each of these aspects.

Analyze

In order to develop a baseline to evaluate the result of the task force, we plan to use a questionnaire directed to a valid statistical sampling of the State. The questionnaire will be administered by Cancer Society volunteers to women 15 years and over in randomly selected households so as to measure how many women have ever had a Pap smear, how often they obtain one, and if not, what the deterrents are to obtaining one. We hope the results will help to guide our efforts and at the same time will serve as a measure to gauge results at the end of the program.

Organize

The campaign will be geared to the 14 districts of the State the Cancer Society uses for its

endeavors. The physicians, private and public organizations and the media — newspapers, radio and television — will be asked to support the promotional and educational effort. Cancer Society volunteers will conduct the efforts in these districts with guidance from the Steering Committee and physicians in their areas.

Promote and Educate

The professional education committee of the Cancer Society will develop programs for physicians to increase the use of screening methods and the aggressive diagnostic approach to atypical or suspicious cervical smears. Experiences of a large teaching hospital⁷ and an editorial⁸ point to the dangers of overlooking in-situ carcinoma by less than an aggressive approach.

There will also be an educational campaign for women in a format suitable to the needs and the population of the districts.

Evaluate

At the end of the campaign, we will conduct a repeat of the household questionnaire to provide a statistically meaningful measure of any change in Pap test usage. The educational efforts will also be measured.

It is the Cancer Society's hope that the Arkansas Medical Society will endorse, work with and support in every way possible this effort. We seek your advice, support and assistance in making this effort a truly meaningful one for our State.*

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*The Council, Arkansas Medical Society, voted favorably to support and assist the Uterine Cancer Task Force of the Arkansas Division, American Cancer Society, Inc., December 3, 1972.

M E D I C I N E I N T H E



THE MONTH IN WASHINGTON

Legislation providing federal aid for establishment of a limited number of experimental Health Maintenance Organizations (HMO's) bills advanced in Congress. The House bill was much smaller in scale (five years, \$240 million, compared to \$805 million) than one passed by the Senate.

In a report on the HMO bill, the House Commerce Committee discussed HMO's and their possible future role in health delivery. No specific number limitation was set in the House bill, but "it is anticipated that the limit of authorizations to \$240 million and the reality of the budget and appropriation process will provide an effective ceiling on the number of HMO's which could be established. . . . Generally, however, the committee would anticipate that this legislation would be used to bring to the operating stage approximately 100 new HMO's."

The report stressed a five-year cut off. "All federal assistance to all assisted HMO's will be completed by the end of five years for which authority is given. Thus, there will be no need to extend or renew this legislation in order to meet outstanding commitments."

After a discussion of "many arguments in favor of HMO's," the report said the committee "is concerned about the fact that HMO's (pre-paid group practice, contract practice, etc.) have not grown more rapidly than has been the case." The committee said it hoped the HMO program would clarify many problem areas, including such basic questions as "will federal assistance to HMO's work?" Other matters of concern were listed as whether federally-aided HMO's will be able to survive without federal help; how well will such organizations serve the poor, chronically ill, and aged; how will they work in ghettos, rural areas; what about consumer acceptability, quality of services, etc.

Noting that an HMO operates under an income limit (the premiums paid), the committee said one fear is that "it would be possible for an

HMO to respond to this limit by discouraging the utilization of its services. For example, the committee is concerned with the possibility that elective surgery such as cataract extractions in elderly people, might be delayed in situations where an HMO is experiencing higher than expected utilization. These practices are to be discouraged."

Cautioning against allowing HMO to have a monopoly anywhere, the Committee said:

"The heterogeneity of the HMO's envisioned by the committee is the key characteristic of the HMO program authorized by this legislation and deserves particular comment.

"In preparing the legislation, the committee has attempted not to describe exhaustively or in detail a single 'proper' system for the delivery of health services. The legislation defines desirable qualities or any system for health care delivery and offers to support any HMO which includes these qualities, however, it may be structured or organized in detail. *Thus, the HMO program sponsored by this legislation would not represent a single monolithic or federally-controlled health system, but a series of additions to our existing pluralistic system.*"

The Committee said that one reason there are few HMO-type programs operating now "is the high cost of planning, development, and initial operations. It has been estimated that the group practice model requires as many as 30,000 enrollees before the plan breaks even with as much premium income as expenses. Planning costs for this type of HMO can go up to a half million dollars. Operating deficits until the break-even point can amount to \$2-\$3 million."

Unlike the Senate bill, the House legislation does not pre-empt state laws that restrict formation of HMO's. The reason given by the House Commerce Committee was "the rapid change already underway in state legislation designed to remove these barriers . . . (with) . . . approximately 20 states have already adopted legislation specifically authorizing HMO's."

RETIREMENT SAVINGS RESTRICTIONS

The outlook in Congress for a new restriction on retirement savings of professional service corporations and a companion liberalization of the Keogh plan for the self-employed was cloudy. Opposition to the limitation on the professional service corporations was reported strong in the House, though the Senate was expected to approve it.

The Senate Finance Committee said in its report on the bill that "it is contended that the present law in the retirement plan area creates an artificial incentive for the incorporation of businesses which more traditionally, and perhaps more appropriately, have been conducted in unincorporated form."

The committee restricted the amount an incorporated professional could save for retirement purposes and receive federal income tax deferred on to \$7,500 a year and not more than 15 per cent of income. The Keogh plan was liberalized to the same levels.

Noting that in recent years all states have adopted special incorporation laws which allow professional corporations, the committee said these "have been used increasingly by groups of professional persons, primarily to obtain the more favorable tax treatment for pensions generally available to corporate employees." The Internal Revenue Service's adamant opposition to these corporations and refusal to recognize them in the so-called Kintner regulations was rejected by the courts until "the service has now acquiesced and generally recognized these professional corporations as corporations for income tax purposes."

The committee said "the formation of professional corporations, a practice which has proliferated enormously in recent years, has had the effect of circumventing the limitations which Congress intended to impose on deductible contributions by persons who are essentially, in most respects, self-employed."

Explaining why it didn't impose any limit on regular corporation tax deferrals for high-salaried executives, the committee said that in corporate plans a "much larger percentage of the contributions and benefits go to the 'rank and file' employees." This "financial drag effect tends to impose practical restrictions..."

LIBRIUM, VALIUM ACTION

Librium and Valium will be subject to tighter federal restrictions. Under a Justice Department proposal, which has been accepted by the manufacturer, Roche Laboratories, the two tranquilizers will be placed in category IV of the Controlled Substances Act. Other major tranquilizers already are in this category.

A prescription may be refilled no more than five times and a written prescription would be valid for no longer than six months. A renewal of the prescription after these limits would require a written prescription.

The proposal would place additional record-keeping and other requirements on drug manufacturers and pharmacists. Primary aim is to prevent diversion into illicit channels.

COUGH-COLD DRUG ACTION DELAYED

The Food and Drug Administration agreed to delay action against prescription cough, cold and allergy products. Interim guidelines will not be implemented until the FDA's over-the-counter review panel has issued a monograph, not expected until next year. Controversial guidelines issued last spring would have prohibited the use of combination antitussives and/or expectorants or decongestants for the common cold and the use of antitussives combined with antihistamines and decongestants for allergic or vasomotor rhinitis. Pharmaceutical and medical groups protested then the lack of input from the medical profession on the proposed ban. Witnesses urged that action be postponed until the scientific community can review the OTC panel's report which is slated to cover much the same ground.

GP BILL

The Administration is planning to appeal a District Court Judge's ruling that President Nixon's pocket veto in 1970 of legislation to aid training in the practice of family medicine was unconstitutional.

The veto of the \$225 million bill to help hospitals and medical schools set up family medicine departments came during a Christmas recess of Congress. The President claimed he killed the bill by use of the 'pocket veto' by refusing to sign the bill while Congress was out of town. Sen. Edward Kennedy (D., Mass.) who filed suit against the President, contended that it was an improper use of the 'pocket veto'. Actually, he

said, the bill became law because the President did not veto it in the normal way thus giving Congress the chance to override it.

The Constitution gives the President 10 days in which to sign or veto a bill passed by Congress. If he does neither and Congress is in session the bill automatically becomes law. If Congress is in adjournment, the bill dies.

U. S. District Judge Joseph Waddy in Washington, D. C., held that the recess in question did not constitute an adjournment. The Judge gave the Administration until Sept. 9 to comply with his order.

ADMINISTRATION'S HEALTH GOALS

HEW Secretary Caspar Weinberger said that health care improvements will come from building "on our historic existing strengths" rather than "tearing down the entire structure because of our dissatisfactions."

In an address to the American Health Congress in Chicago, the Secretary said his Department was "absolutely and totally committed to do whatever may be necessary to assure that quality health care is readily and equally available to every American."

He said, however, that meeting this goal means devising "a total health strategy in which every possible program or option is carefully and objectively weighed — against each other and against the limits of our present revenue resources — before decisions are made."

"No longer are we committed to support all on-going programs," said the Secretary, "just because we once decided to start them."

"We have made the basic decision to build on our historic strengths in the health care field," he said, "closing obvious gaps, making needed improvements and instituting prudent innovations — rather than tearing down the entire structure because of our dissatisfactions and starting on something entirely different."

He said the nation would not stand by while inner city residents lack decent health care, 120 American counties are without medical facilities and health personnel, costs skyrocket past the means of average citizens, and "the dangerous trend toward overspecialization in medical practice," continues.

"This Administration is prepared to pay the bill for an improved health care system," said Secretary Weinberger, "but only for concrete results."

He said that means "that while we're raising the Federal investment in health care — we are also reducing the unrealistic expectations of some program managers. We are also determined to make each Federal dollar stretch further."

He noted that for the current fiscal year, "the President has proposed a 21 percent increase in health funding. That amounts to nearly \$4 billion more — and brings the total Federal health investment to nearly twice the annual amount spent when President Nixon took office."

He said the Administration's "total health strategy involves a number of new initiatives and a conscious attempt to weave together existing programs which meet well-defined needs and new approaches which not only fill present gaps, but will meet estimated future needs."

He said the four highest priorities are:

National Health Insurance; Health Care Cost Control; the National Cancer and Heart Programs, and movement toward an all volunteer blood supply.

VA BILL INTO LAW

Legislation signed into law by President Nixon extends Veterans Administration medical care to certain dependents, assures peacetime veterans the right to VA medical care and streamline VA rules on health care delivery.

Outpatient medical care for non-service connected conditions is authorized when it would avoid the need for hospitalization.

The law, effective September 1:

- Extends eligibility for medical care to the wife or child of a person who has a total and permanent disability, resulting from a service-connected condition, and to the widow or child of a person who has died of a service-connected condition. Care will be provided in a manner similar to that in which medical care is furnished by the Armed Forces under the so-called "CHAMPUS program" to dependents and survivors of active duty and retired personnel.

- Removes the requirement for wartime service as a condition of eligibility for VA medical care.

- Liberalizes rules on providing VA outpatient or ambulatory care any veteran who is now eligible for VA hospitalization can be treated as an outpatient as necessary to preclude the need for hospital admission.

- Authorizes direct admission to nursing homes, at VA expense, of veterans requiring nursing home care for service-connected disabilities as stated by a VA physician.

- Specifically authorizes VA outpatient care for all disabilities for veterans with service-connected disabilities rated 80 percent or more disabling.

- Provides for the National Academy of Sciences to study the staffing of the VA hospitals and report on this subject.

- Extends VA mental health service to the families of veterans when it is related to the mental health or rehabilitation of an eligible veteran.

* * *

State Medical Assistants Pass Exam

Four Arkansans were among the 356 medical assistants who have become Certified Medical Assistants (CMA's) by successfully passing the 1973 Certification examination conducted by the American Association of Medical Assistants on June 22nd. The four Certified Medical Assistants and their employers are:

Wanda Allen, Drs. J. Warren Murry and Jack A. Wood, Fayetteville

Alice Adams, Hoge Professional Association, Inc., Fort Smith

Blanche Ringold, The Doctors Clinic, P.A., Pine Bluff

Barbara Stillings, Dr. D. B. Stough, III, Hot Springs

Medical Assistants Sponsor Educational Seminar

The Arkansas State Society of the American Association of Medical Assistants held their second annual educational seminar in Little Rock October 13th and 14th. Miss Mary Joe Spencer, who is employed by Dr. Elbert H. Wilkes in Little Rock, is Education and Certification Chairman of the State Society.

Included in the program were "Diabetes" by Dr. Hal Dildy; "The Drug Scene — Socially" by Major Tudor; "Fast Statements by Pitney Bowes" by Mr. Ken Sykes; "Workshop on Letters and Grammar" by Miss Ruth Powell; "Auricular Repositioning Otoplasty" by Dr. Ellery Gay; "Cadaver Kidney Transplants" by Dr. William Flanigan; "Medicine and Religion" by Dr. Jasper McPhail; "Transactional Analysis" by Dr. Emil McCarty; "Cobalt and Radiotherapy" by Dr. Ducote Haynes; and "The Drug Scene — Medically" by Dr. Morris Levy.

A banquet on Saturday evening honored the medical assistants in Arkansas who have passed qualifying examinations for "Certified Medical Assistant." The Certified Medical Assistants are Joy Adams, Fort Smith; Alice Adams, Fort Smith; Wanda Allen, Farmington; Pat Avery, Hot Springs; Betty Colvert, Little Rock; Leodia Guenther, Mountain Home; Patricia Harrison, Mena; Nan Jones, Little Rock; Edith Moser, Little Rock; Marilyn Pryor, Texarkana; Blanche Ringold, Pine Bluff; Vera Stemmler, Pine Bluff; Barbara Stillings, Hot Springs; Betty Stipsky, Fort Smith; and Pebble Watt, Pine Bluff.



ANSWER—Electrocardiogram of the Month

Atrial rate = 82

Ven. rate = 82

PR = 0.08 to 0.12 & 0.18

QRS = 0.14 & 0.12

There are two types of QRS complexes which alternate with each other. The larger QRS complexes are preceded by shorter PR intervals. Both QRS complexes show RBBB.

The initial parts of both types of QRS complexes are directed left — up and slightly anteriorly.

The larger QRS complexes — #1, 3, 5, & 7, in Lead I show further aberration of conduction suggesting left posterior fascicular block.

These relationships suggest that a gating mechanism is operating in the region of the A-V node — His bundle region. Impulses from the atria passing swiftly through the A-V junction arrive before the LP fascicular block. Following this beat, the AV junction is slightly refractory and the subsequent atrial impulse passes more slowly through this region. At this point, however, the previously refractory LP fascicle has recovered and thus the impulse depolarizes the ventricle with RBBB only. RBBB is a frequent finding in Tetralogy of Fallot and is nearly routinely produced at the termination of right ventriculotomy for surgical correction if not present before.



PERSONAL AND NEWS ITEMS

Dr. Coker Guest Speaker

Dr. Tom P. Coker of Fayetteville will be a guest speaker at the annual meeting of the Central States Chapter, American College of Sports Medicine which will be held December 8th at the University of Kansas in Lawrence, Kansas. Dr. Coker's topic will be "Ligament Injuries in Sports."

Physician Joins Clinic Staff

Dr. Jon K. Newsum, a family practitioner, has joined the staff of the Millard-Henry Clinic in Russellville. Dr. Newsum is a native of Fort Smith.

Dr. Poindexter Elected

Dr. Douglas A. Poindexter of Conway was installed as president of the Conway Kiwanis Club on September 26th.

Members Speak at Meeting

Dr. Charles Boyd, Dr. John W. Lane and Dr. W. Turner Harris, all of Little Rock, were guest speakers at a meeting on "In Vivo — In Vitro Procedures in Nuclear Medicine," which was sponsored by the Nuclear Medicine Technologists of Arkansas. The meeting was held in Little Rock September 21st and 22nd.

Dr. Burton Has New Associate

Dr. George C. Burton has announced that Dr. Spencer G. Mitchell is now associated with him for the practice of radiology at 427 West Oak in El Dorado.

Physicians Receive Fellowship Degree

Thirty-one members of the Arkansas Academy of Family Physicians received the degree of Fellow from the American Academy of Family Physicians on October 2nd in Denver, Colorado. Those receiving the degree were: Drs. John E. Alexander, Magnolia; James D. Armstrong, Ashdown; Charles R. Baker, Little Rock; Clark M. Baker, Paragould; Omer E. Bradsher, Paragould; Carie D. Buckley, Jr., Fayetteville; Curtis B. Clark, Sheridan; John W. Dorman, Springdale;

C. Randolph Ellis, Malvern; A. Meryl Grasse, Calico Rock; C. Lynn Harris, Hope; Preston L. Hathcock, Fayetteville; Don G. Howard, For-dyce; Charles N. Jones, DeQueen; James L. Jones, Fayetteville; Charles W. Kelley, Magnolia; Charles H. Kennedy, North Little Rock; Henry V. Kirby, Harrison; C. C. Long, Ozark; Jerome H. Luker, Dardanelle; Jim E. Lytle, Batesville; Monroe D. McClain, Little Rock; Harold J. Morris, Pine Bluff; Billy J. Puckett, Siloam Springs; Oliver C. Raney, Pine Bluff; John A. Rollow, Bentonville; John M. Tudor, Little Rock; Paul A. Wallick, Monticello; George W. Warren, Smackover; Harry M. White, Rogers; and Robert H. White, Malvern.

Dr. Collier Honored

"Dr. T. J. Collier Day" was observed in Hot Springs with a program in Dr. Collier's honor on September 30th at the National Baptist Building. Dr. Collier has served as a Deacon and Trustee of the Roanoke Baptist Church in Hot Springs. He has also served as County Health physician for more than twenty-five years and was physician for the Langston High School athletic department for the same length of time. He has been active in the Chamber of Commerce, has served as a member of the Board of Directors of the Quapaw Vocational Technical School and is a director of the Grand National Bank.

Physician Joins Dr. Johnson

Dr. William V. Relyea, a general surgeon, has joined Dr. J. Albert Johnson in the practice of medicine at 112 North Bailey Street in Jacksonville. Dr. Relyea retired from the Air Force in 1971, after completing twenty-two years of service.

Dr. Hawkins Honored

Dr. Wright Hawkins of Fort Smith was chosen "Doctor of the Year" by the Sebastian County Medical Assistants Society. Dr. Hawkins received a plaque commemorating the honor at a banquet on October 11th.



NEW MEMBERS

Dr. Terry G. Green

Dr. Terry G. Green has been accepted for membership in the Pope-Yell County Medical Society. He is a native of DeWitt, Arkansas.

Dr. Green received his B.S. degree from the University of Arkansas in 1969. He was graduated from the University of Arkansas School of Medicine in 1972 and completed his internship at Baylor University Medical Center in Dallas, Texas.

A family physician, Dr. Green is associated with the Dardanelle Clinic, 505 Union Street, in Dardanelle.

Dr. James D. Russell

Dr. James D. Russell, a native of Warren, Arkansas, is a new member of the Pope-Yell County Medical Society.

Dr. Russell was graduated from Arkansas A. & M. College in 1968 with a B.S. degree. In 1972 he was graduated from the University of Arkansas School of Medicine. His internship was completed at the Confederate Memorial Medical Center in Shreveport, Louisiana.

Dr. Russell is a family practitioner. He is associated with the Dardanelle Clinic, 505 Union Street, Dardanelle.

Pulaski County

The following interns and residents are new members of the Pulaski County Medical Society:
Arkansas Baptist Medical Center

Roland C. Reynolds, Intern

St. Vincent Infirmary

Joe D. King, Resident—Family Practice

David H. Roberts, Intern

University of Arkansas Medical Center

Alan Aycock, Resident—Ear, Nose and Throat

C. E. Ballard, Jr., Resident—Otolaryngology

Larry D. Battles, Intern

James W. Bean, Resident—Otolaryngology

James S. Beckman, Jr., Resident—General Surgery

David W. Bevans, Jr., Resident—Surgery (Thoracic)

Fay W. Boozman, Resident—Ophthalmology

René E. Bressinck, Resident—Dermatology

Hugh F. Burnett, Resident—Surgery

S. A. Davie, Resident—Ear, Nose and Throat

C. Frank Dodson, Jr., Resident—Orthopedic Surgery

Joseph P. Fetzek, Resident—Dermatology

Robert D. Fisher, Resident—Anesthesiology

Michael G. Futrell, Resident—Medicine

C. Don Greenway, Intern—Medicine

Donald R. Guinn, Resident—Medicine

John R. Hampton, Resident—Internal Medicine

Thomas T. Jefferson, Resident—Pediatrics

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ERRATUM

The October issue of the Journal of the Arkansas Medical Society contained an article on Dr. James S. Mulhollan of Little Rock. Dr. Mulhollan's name was inadvertently misspelled in the article.



OBITUARY

Dr. William E. Jackson

Dr. William E. Jackson of Rison died September 7, 1973. He was born in Mulberry, Arkansas, on September 2, 1932.

Dr. Jackson received his B.S. and B.A. degrees from the University of Arkansas at Fayetteville in 1956 and 1958, respectively. He attended the Emory University Dental School in Atlanta, Georgia, for two years. Dr. Jackson was graduated from the University of Arkansas School of Medicine in 1964 and completed his internship at Arkansas Baptist Medical Center. Following the completion of his internship, he served two years as a captain with the Medical Corps in Viet Nam. Dr. Jackson practiced in Atkins and Lewisville before moving to Rison in 1970.

He was a member of the Arkansas Medical Society, the American Medical Association, and the Dallas County Medical Society. He was a member of the Rison Baptist Church.

Dr. Jackson is survived by his wife, Mrs. Ruth Moss Jackson, two sons and two daughters.

Dr. Hamilton Kelso Carrington

Dr. H. K. Carrington of Magnolia died September 25, 1973, at the age of eighty-four. Born August 26, 1889, Dr. Carrington was a graduate of the Magnolia School System and did undergraduate work at Washington and Lee University in Lexington, Virginia. He received his M.D. degree from Tulane University School of Medicine in New Orleans in 1925 and completed his internship in Birmingham, Alabama.

Dr. Carrington practiced in El Dorado until 1928 when he returned to Magnolia. He was in practice there with the late Dr. William P. Cooksey for several years. He then entered private practice and, in 1939, Dr. John H. Wilson joined him in his practice. From 1942 until 1945, Dr. Carrington served in the United States Army Medical Corps. He retired from military service in 1945 due to ill health. In 1948, he re-entered private practice until 1956 when he was forced

to retire from his thirty-one-year career in medicine because of ill health.

Dr. Carrington was a member of the American Medical Association, the Arkansas Medical Society, the Columbia County Medical Society, and the First United Methodist Church.

He is survived by his wife, Mrs. Hazel Butler Carrington, and one son.

Dr. B. G. Parker

Dr. B. G. Parker of Booneville died October 12, 1973. He was born on June 13, 1929, in Stillwell, Oklahoma.

Dr. Parker was graduated from the University of Arkansas School of Medicine in 1959 and interned at St. Benedict's Hospital in Ogden, Utah. He was a member of the American Medical Association, the Arkansas Medical Society, and the Logan County Medical Society.

A Methodist, Dr. Parker is survived by his wife, Sharon, and two sons.



THINGS



TO

COME

Central States Chapter — American College of Sports Medicine to Meet

The annual meeting of the Central States Chapter, American College of Sports Medicine, will be held at the University of Kansas, Lawrence, Kansas, on December 8th. Topics to be discussed are "Ligament Injuries in Sports", Tom P. Coker, M.D., Fayetteville; "Physical Fitness of Children", Charles B. Corbin, Ph.D., Kansas State University; "Cryotherapy in Sports", W. C. Tice, Northwest Missouri State University; and "Anabolic Steroids and Physical Performance", Barry S. Brown, Ph.D., University of Arkansas. For further information contact Dr. Harley Hartung, Department of Physical Education, Central Missouri State University, Warrensburg, Missouri.

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Adenolipoma of Breast

Case Report With Mammographic Findings and Review of Literature

Kil Soo Lee, M.D.*, and Wilma C. Diner, M.D.**

Adenolipoma is an unusual breast tumor. It was formerly regarded as a malignant tumor, but more recently has been recognized as one of the benign tumors. Because it has the same consistency to palpation as normal breast, but characteristic radiographic appearances, the radiologist can be very helpful by suggesting the diagnosis on the mammogram.¹

Clinical and pathological characteristics have been described.^{2,3,4,7} However very few illustrations of mammographic findings have appeared^{1,3} and these have been only of what may represent an early stage. The late stage appearance is quite different and is shown herein for the first time.

CASE REPORT

A 62 year old Negro woman presented with a 20x20x20 cm mass in her left breast. She stated that it had grown slowly for 39 years following breast feeding of her first child. She had never experienced any pain, bleeding, or discharge from the nipple. On examination the left breast was approximately three times the size of the right breast, soft, but not fluctuant. There were no skin changes or fixation to the surrounding tissues. No axillary nodes were palpable. Mammographic changes are illustrated. (Fig. 1).

After biopsy of the lesion, a simple mastectomy was performed. Grossly, most of the parenchyma of the breast was replaced by an encapsulated lobular mass of yellow fatty tissue measuring 15½ cm. in circumference. Cut section revealed a yellowish, lobulated fatty mass with fairly firm greyish-white septa separating the lobules of fatty

tissue. Histologically, the tumor consisted of multiple areas of ductal tissue in direct contiguity with mature fat, a finding characteristic of mammary adenolipoma. (Fig. 2).^{* 4, 6, 7}

*Pathological description by Dr. James W. Seay, Chief Resident, Pathology, University of Arkansas Medical Center, 4301 West Markham, Little Rock, Arkansas 72201.



Figure 1
The mammogram shows a large, well-encapsulated, rather homogeneous soft tissue density measuring approximately 17 cm. in diameter with characteristic scattered linear calcifications.

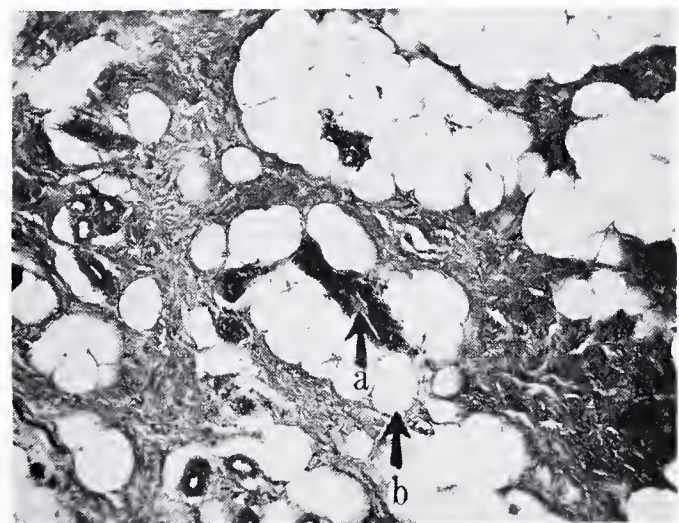


Figure 2
Photomicrograph of the lesion shows multiple areas of ductal tissue (a →) in direct contiguity with mature fat. (b →)

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DISCUSSION

The classical histological description of adenolipoma of the breast was that of Spalding.⁶ He believed that it represented a true mixed tumor with both fatty and epithelial elements growing simultaneously because, (1) epithelial tissue is evenly distributed throughout the tumor; (2) there is no remnant of intralobular connective tissue at the periphery of the tumor, and fat cells extend to the walls of the ducts; (3) the epithelium is not distorted; and (4) the tumor is well-encapsulated. He reasoned that the tumor arose within mammary lobules by proliferation of epithelial and connective tissue cells, the latter being differentiated into fat instead of normal loose connective tissue. Other views of the pathogenesis of the tumor include that of Tedeschi⁷ who suggested the revival of embryonic mammary elements segregated into the breast during development since a capsular boundary was present, glandular acini were absent, and, finally, mammary epithelium was in direct juxtaposition with fat, a situation found normally only in embryonal breast. Haagensen⁴ reviewed 22 cases during the 25 year period between 1943 and 1968, and favored fatty infiltration of normal breast rather than simultaneous growth of both elements.

Egan considers this tumor to be a variant of fibroadenoma. He described two types of changes in mammograms of four patients.³ In three patients, 21-41 years of age, a large well-encapsulated tumor with irregular dense areas of glandular islands in the background of radiolucent fatty tissue was demonstrated on the mammogram. This finding resembles quite closely that of cystosarcoma phylloides. Egan's fourth patient, 75 years old, had a large, smoothly outlined encapsulated tumor, not quite as radiolucent as fat, which contained gross amorphous irregular plaque-like and linear calcifications. No roentgenograms were shown but by description our patient more closely resembles this one. Egan³ feels that the two patterns may represent stages, or different appearances at different ages.

Durso¹ recently published a case of adenolipoma of the breast with the same mammographic changes as Egan's younger patients.

Haagensen⁴ states that this tumor appears to occur in a slightly younger age group than simple lipoma, which is seen at a mean age of 45, while that of the tumor is about 42. Simple local excision is the treatment of choice.

Radiologists may have the best opportunity to make the diagnosis of adenolipoma on mammograms because the consistency of the tumor is the same as that of normal breast tissue and diagnosis by physical examination is difficult.

SUMMARY

A patient is reported with a huge adenolipoma (late stage) of the breast. The mammographic findings of an early adenolipoma are a large, well-encapsulated tumor with irregular dense areas of glandular islands in the backgrounds of radiolucent fatty tissue. In the later stage there is a large well-encapsulated homogenous mass which is not quite as radiolucent as fat and contains irregular plaque-like or linear calcifications. Our case resembles the latter descriptions. To our knowledge, this represents only the second case of late adenolipoma to be reported and is the first time the mammograms have been reproduced.

ACKNOWLEDGMENT

Thanks are due to Dr. Robert L. Egan of Atlanta, Georgia, who helped us recognize the nature of this tumor which was unfamiliar to us when first seen.

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The Psychodynamics of Depression

Robert F. Shannon, M.D.*, and Joe T. Backus, M.D.**

The psychodynamics of an emotional illness is to psychiatry what pathology, pathogenesis and clinical pathology is to medicine. The descriptive psychodynamics attempts to tell the what, why and how of a person's emotional disorder. Under this heading are included psychosocial development, personality patterns, defense mechanisms, and psychopathology. Dynamically two types of depression are recognized: the "endogenous" and the "exogenous" (extrinsic or "reactive"). Clinically they seem very similar but historically, descriptively and prognostically they are different.

Endogenous Depression

I. The "endogenous" depression occurs in persons with a "depressive personality". Its onset may be unrelated to any obvious external environmental circumstances, the symptoms may be more severe, the duration longer and the course may be different from the "exogenous" type.

Depressive personalities theoretically result from a partial fixation of psychosocial development at the oral stage, i.e. at the stage of sucking and biting when the infant is totally dependent upon his mother for all his gratification. The fixation results from the child's not having his needs properly met by his mother during the earliest months of life. The failure of the mothering one includes more, of course, than just oral needs and involves feelings of love, warmth and all round care and attention. The primary cause could be a cold, rejecting or perhaps depressed mother but it is not impossible that some newborns have insatiable needs, genetically acquired, which no mother could meet.

A person with such an oral fixation grows up to be overly dependent and to be particularly concerned with so-called oral gratification. He shows this by being clinging and demanding of those around him and by seeking excesses of all types (e.g. food, drink, love, attention, praise and pleasure). He grows accustomed to having his needs frustrated, never fully met, so he also learns to expect people to fall short, to

disappoint him, to not feed him, love him or praise him enough. This makes him constantly angry and on guard, suspicious of eventual rejection. Those closest to him (loved ones) frequently are tested by subjecting them to greater and greater demands. This leads to eventual anger and rejection from the loved one. The depressive, when rejected, will react with a mixture of despair and anger and depending on circumstances and previously learned patterns, may compensate by: (1) substituting another gratification (2) giving in to the anger invoked (through pouting, nagging, fighting) (3) denying the conflict or by (4) reacting to the combination of the hurt from being rejected and the guilt from his hostility toward the person who rejected him with depressive moods.

The depressive personality is trapped with the combination of excessive needs, the expectation that loved ones will not fulfill those needs, a high level of hostility and distrust toward loved ones which leads to "testing" their love by greater and greater demands, then eventually some painful and unsatisfactory reaction to it. Since this frustrating sequence hinges upon close relations with loved ones the depressive grows to look at close relationships with fear and suspicion. He puts up barriers to avoid closeness with people. The barriers take many forms again depending upon learned patterns. The simplest solution would be total avoidance of people, but the depressive needs people and what they can give him so that solution is impossible. He learns to keep his distance, to be "with people" but never really close. Between him and people, he may put a pad of fat—by overeating which would gratify another of his needs. He may use alcohol as a way to dissolve his conflict and let him be with people but too numb to get really involved with them. He may avoid close relationships by having a larger number of superficial ones, by being gregarious, outgoing, "happy go lucky", "devil may care", but guarded and aloof when faced with closer than social relationships.

However he builds his barriers, in so doing he denies himself the thing he needs most and his dependency needs become ever greater and

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gratification more unattainable. Methods of coping with unmet dependency needs can vary according to early experiences but most depressives present as a part of their picture a facade of super independency. They appear to need no one and to be quite sufficient unto themselves. As if to convince themselves and the world of their super independence they frequently become helpers of others—they not only need no one, they can help all. The depressive personality, when not actually in a depression, may be on the surface, socially active, self-sufficient and a “friend” to all who need him. Under the surface, however, is a very dependent, unsure, unhappy, hostile, lonely frustrated person who suffers from moodiness, anxiety and one or more excesses in the area of oral gratification. Such a person often is a “too much” person—whatever he does, he over-does. He is often very successful in his career and superficially in his family roles as well. But his basic problems are always with him; mood swings interfere with performance and whatever he does, he carries inside himself an overwhelming need to be totally cared for.

Defense mechanisms are the automatic ways a person uses to cope with the anxiety-producing conflicts which are constantly arising within his psychic functioning. The conflicts are created by the incompatibility of his needs. Instinctively man is a quite selfish animal who wants all his drives gratified in the quickest and fullest way without any regard for anything else. Freud used the term Id to represent this part of man's psyche. Opposed to this is man's learned social, moral and interpersonal storehouse of needs, which include the need for approval, security, safety, being “good” and pleasing authority figures. This part of the psychic process Freud labeled the Superego.

Both the Superego and the Id are so deeply embedded, so overwhelming in their needs that they operate almost totally on an unconscious level. Most of their gratifications, though, come from outside the psyche, from the real world. To arbitrate for both of them with reality and with each other there's a part of the mind which carries on both consciously and unconsciously, using functions like perception, cognition, reasoning, judging, communicating, etc. to keep the mind running smoothly. This Freud called the Ego and he felt that the defense mechanisms

were unconscious ego functions learned as the personality developed, used automatically at times when conflicts arose between the Id, Superego and reality as ways of pacifying so that disruptive anxiety wouldn't overwhelm the ego.

Anxiety arises when basic needs aren't met or when two or more needs are contradictory. The defense mechanisms are unconscious because of conditioning and economy but in early psychic development most or all were probably learned at a conscious or unconscious level. They became automatic through repeated use. Thus, though unconscious to the user, defense mechanisms became a permanent determinant of behavior patterns, playing a crucial role in man's reactions to stressful situations. The unconscious automatic processes require energy. They are also less than perfectly efficient and not only let some anxiety build up but can cause the person to spend much effort in seemingly useless activity. Ideally the perfectly healthy person would have such understanding and control of himself that he'd have no use for defense mechanisms. Practically, however, no one is that healthy. The person who functions in the normal range uses a variety of defense mechanisms without undue or crippling interference. It is when defenses fail, or are used excessively or exclusively that symptoms of emotional illness become manifest.

The defense mechanisms used excessively by the depressive personality are of two major types: one centers around denial and displacement while the other involves a combination of introjection—projection. Through the former the depressive personality can deny some needs (love, attention) and substitute excesses of others such as alcohol or food. He can deny his dependency, even to himself, while seeming to be independent. Or he may deny his anxiety about a need for people. Displacement may be onto exaggerated concern with body functions or even actual development of peptic ulcers or other psychophysiologic disorders through prolonged stress and anxiety. He frequently denies and holds in his hostility and resentment and substitutes a seeming great concern for the welfare of others. While each of these could, in excess, markedly disrupt normal functioning, they usually won't until mixed with the second defense type, introjection-projection.

Introjection is a defense mechanism whereby a person takes on responsibility for characteristics, events, acts which are realistically outside his control. Through introjection he assumes blame for things he didn't do. He feels at fault when blameless; guilty when innocent. This defense has its genesis in man's need to feel important. He has such a need to be important that he'll take on painful responsibilities which aren't his. The orally fixated child, though feeling rejected and in need of love, more comfortably accepts that his rejection must somehow be *his* doing rather than that his mother just didn't care. For if his mother didn't care then his situation was hopeless because he was alone—but if it were his fault, under his control, then if only he'll do the correct thing his mother will love him and all will be well. So accepting blame becomes a way of reacting because it is more acceptable to be wrong and guilty than to be ignored and unloved. Introjection also, in a warped way, gives a great deal of power to the person using it. He can't really be nothing or nobody, no matter how rejected or miserable, because of how important, how guilty, how awful he is. So as a defense against nothingness it offers considerable insurance. Then as a depression starts, as a feeling of loneliness and unimportance grows, introjection grows with it allowing the depressive to at least hold on to his guilt and overwhelming sense of responsibility.

Projection as a defense is the other side of the introjection. The projector gives to others his feelings, faults and characteristics. He may blame others for his acts or more likely he will read into others the feelings he unconsciously has himself. Thus if he has unconscious homosexual desires he will attribute such desires to other people or he may feel that they think he is homosexual. The depressive mixes his projection with his introjection in such a way as to severely handicap close interpersonal relationship. He may project to others his great need for love, feeling they are overly demanding of him. His fear of being hurt, which makes him stay aloof from closeness, he may project onto others saying they are standoffish.

Introjection and projection work to create ever increasing distortions in communication. The more his communication is distorted the more isolated the depressive becomes. Isolation leads to even more of a deficiency in his de-

pendency gratification, thus to more anxiety, more defensiveness and an ever worsening depressive cycle.

Since these cycles can be precipitated by intrapsychic needs, which may or may not have much relevance to external factors, the depressive reaction that occurs in such an individual is called "endogenous" because its causes come from inside the person's personality structure.

The dynamics of such an "endogenous" depressive personality can be summarized as follows. Psychosocially he is partially fixated at the oral stage of development. His relationship with his mother or mothering one was unsatisfactory from early childhood. This led to increased and unmet dependency needs combined with an expectation that his dependency needs would never be met. Chronic frustration led to chronic anger and the two central themes of his life became growing unmet dependency needs along with growing resentment and anger. To deal with these he developed certain patterns of life and defense mechanisms which outwardly helped him to cope with life and people. They also added to his difficulties in getting close enough to gratify dependency needs or in feeling free enough to healthily express anger. He became outwardly independent and self sufficient and inwardly lonely and scared. He substituted "things" for relationships with people and became a "too much" person in some respects. His chief defenses of denial, displacement, introjection and projection allowed him to function but progressively led to more isolation, a worsening of his basic dependency and hostility. Eventually his mood swings ("up" or hypomanic when denial and/or projection is being used excessively and "down" or depressed when using introjection) begins to interfere with his outward function. He becomes less stable and finally has a clinically recognizable depressive reaction. Since he trusts no one and reveals himself to no one he will likely wait until severely depressed before seeking help. He may be brought to his physician by someone else and may continue his pattern of denial even with his physician and may try to smile and refuse help. His overall clinical picture, however, will make diagnosis fairly evident. He may commit or try to commit suicide. If his defenses have gotten extreme enough he may be out of contact with reality in which case his depressive

reaction would be of a psychotic type. The dynamics not only determine the process of becoming ill but are of great significance in the process of getting well. These will be discussed in a separate article dealing with therapy.

Exogenous or Reactive Depression

II. The "exogenous", "extrinsic" or "reactive" depression could theoretically occur in any one regardless of personality structure. The main essential is that the person be subjected to stress and the stress include the loss of something meaningful to the person. The loss can be great or small, external or internal, real or imagined but there must be a loss for a reactive depression to occur.

The loss can occur suddenly or gradually. The depressive reaction may follow immediately, may creep up insidiously or may be delayed for days, weeks or months. The nature of it may be so subtle, so personal, even so unconscious to the depressed patient that others, including the physician, may have difficulty recognizing it as a loss at all. For instance, many depressions have been precipitated by events that outwardly seem to be happy ones. Events such as marriage, childbirth, an anniversary, a promotion, retirement or sudden "good" news may represent a loss of some sort to the depressed patient. It may be the loss of a hope, an expectation or even an excuse (one patient became depressed after a promotion because for years he had planned what he could do in that job, yet when he got the job it was apparent his inadequacies held him back and he became depressed because he had lost his excuse). Whatever the loss is, by the time a person becomes depressed the loss has become uniquely internalized.

Although no personality is completely immune to a depressive reaction there are some common traits and there are times of life when depression occurs more frequently.

Persons most likely to become depressed are logically the people who would be most prone to see some loss as overwhelming. Over sensitivity, insecurity, immaturity, dependency and rigidity are common traits. People with restricted lives or limited interests are most apt to over-react to a loss. One who has difficulty handling his hostility is more likely to hold in his feelings of anger and become depressed. Someone whose physical health is declining is

more inclined toward depression. Depressions are more likely to occur during times of "normal" stress such as adolescence, post-partum periods and middle age. While the clinical pictures vary somewhat it is doubtful that depressive reactions occurring during the different times of life represent different illnesses. Such depressions are similar but there are noteworthy variations.

Adolescent Depression

A depressed adolescent may have the classic symptoms described earlier but sometimes there are misleading differences. In the place of the sad effect an adolescent may appear belligerent, sarcastic and hostile. His apathy may be expressed more in cynicism. "Why should I care?", "What's the use?", "Who gives a damn?". His painful thinking may be expressed through withdrawal of effort from expected pursuits. His hostility toward himself is expressed through efforts at evoking abuse from the adult world. The "loss" will vary from individual to individual but generally has to do with some combination of the loss of being a child (and its relative security and small responsibility) plus the loss of overall identity which takes place with the numerous physical, social and sexual changes of adolescence. He commits social and moral suicide and all too often will commit physical suicide as well. While this is frequently direct it is more often indirect through a disregard for his body or his well being (thus he'll race motorcycles, smoke pot, take dope, fail school, get into legal or economic trouble, take any chance because he really doesn't mind dying—a passive suicide). His feelings of hopelessness are philosophical and generalized to include the whole world and all of society. His attitude and conduct is such that if the physician is not attuned to the depression underlying this facade he'll dismiss the adolescent as a smart-alec and send him off to continue his suicide. When recognized for what it is, though, a depression in adolescence can usually be treated more quickly and easily than any other.

Post-Partum Depression

The post-partum depression usually occurs in a woman who has mixed feelings about motherhood—or at least about the birth and subsequent presence of the particular baby whose birth was a precipitating factor in the depression. The depressive symptoms may begin before birth,

shortly after, or usually, several weeks afterward. Though getting such a mother to express her honest feelings is often difficult, when and if she does, it's usually apparent that this baby somehow let her down. She either didn't want it, thought she wanted it and found she didn't, had placed great hopes in the birth "solving" pre-existing problems and has found it didn't or is disappointed with some significant person (usually a mother or husband or both) who is either overtly or covertly condemning her for having the baby. In any event, she finds herself progressively resentful of the child, at the same time she feels guilty for the resentment. The loss in this case would be centered either in the lost hope for positive change or whatever loss occurred due to the altered living circumstances of having a newborn infant. Strong feelings of wanting to kill the newborn are common*. A situation of growing stress develops and a depression ensues. Depending on the premorbid adjustment of the mother, the attitude of the husband and the motivation of both, such a depression can be fairly easily and rapidly reversed. Given the wrong condition, however, postpartum depression can lead to a most tragic end. Good history plus good rapport with both parents is the best guarantee of a favorable outcome. Early detection and prevention is even better.

Depressions of Middle Life

The middle aged person is statistically the most vulnerable to depression. The depression usually occurs in a woman, less often a man, who has mixed feelings about growing old. Her life style has undergone considerable change due to children growing up and husband being less attentive as they pour most efforts into their careers. She usually led a rather restricted life centered around child rearing and the home. The depression will be ushered in by a combi-

nation of losses: children's dependency, husband attentiveness and physical beauty. In essence, there seems to be a culmination of evidence to the middle aged depressed female that nobody needs her.

First manifestation may be excessive alcohol intake, drug use, weight gain, physical complaints or progressively worsening interpersonal relations. Doubts about her femininity occur and these may lead to either social withdrawal or flights into promiscuity. Eventually, though, a rather classic clinical picture of depression emerges and treatment is indicated.

Other Depressions

Nobody is immune to depression and children and older people are apt to get depressed if sufficiently stunned by a significant loss. It's important to remember that depression can happen to those of your patients who seem outwardly stable and the type you would usually say can handle anything.

Summary

Reactive depressions occur in people who are subjected to significant stress which involves a critical loss to self esteem. Anyone could suffer a depressive reaction but those people who are overly dependent, rigid, self critical, demanding and hostile are most apt to do so. Adolescence, the post-partum period and middle aged are the most common periods of life for the occurrence of a depressive reaction.

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* (Expressed as fears of harming the baby).



The Family Practice Program at the University of Arkansas—Past, Present, and Future**

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Abstract: The Family Practice Division and Residency Program is reviewed—development, present status, and future plans. Today I will briefly restate the definition and range of Family Practice and, briefly, outline the history of the development of the new specialty and the program of the University of Arkansas Medical Center. Speaking of the present I will point out the rapid growth and the strong interest we have had in this field, the excellent support that we have had from the administration and government, and the gradual development of a commitment to this department as a major goal of the entire faculty and staff at the Medical Center. For the future I will outline what must happen if we are to have any significant impact upon the practice of medicine as a provider of health care in the state of Arkansas, especially outside of Little Rock.

Section 1 — Development of Family Practice at the University

I have been able to find out very little about the rotating, general practice, and family practice programs which have been tried in the past. I know that the University had a two year program in the late fifties' and early sixties' and that some of our state's finest general practitioners were trained or began their training in that program. Interns ceased to sign up for the second year, and the program was dropped.

Approximately 25% of University of Arkansas School of Medicine graduates (including the last decade) have entered general or family practice. As specialty practice has altered the patient's expectations, general practice had altered its skills. There are differences in depth of training and perspective in relation to other specialties. Some have reached this present state by adaptation, some through post-graduate and continuing education of their own design, and a few via structured family practice residency.

The period from 1948 until 1960 could be labeled the recognition of the general practice role.

The sudden surge of specialization in the post war period was recognized as being accompanied by a decline in the attractiveness of general practice. Many prophets are now in a position to say "I told you so". I recently read a quotation from a Dr. Crosby in 1948 pointing out that doctors would more closely affiliate and become more dependent upon the hospital as a site for their practice. Our own Dr. Sam Thompson published an article in the *Journal of the AMA* in 1946 outlining some approaches to the general practice problem. Drawing on their experiences as:

1. A GP in Camden
2. Military service in specialty organization. "They reviewed the situation." Basic criticism:
 - (a) Failure of the GP to differentiate between the trivial and the serious.
 - (b) Failure to observe the limitations of his training.

Life expectancy increased from 33 to 60 years before specialization.

The problem is still one of "persuading the head of the house to give up tobacco or his wife to have extensive and dangerous surgery..."

1. Emphasize General Practice through —
 - (a) Local care programs as VA
 - (b) Staff appointments
one competent GP to each service to advise the chief of service on parts of specialty to be emphasized.
 - (c) GP services in teaching, military, and veterans' hospitals. For routine, not necessarily minor conditions

2. GP training to emphasize limits specialists, to communicate new concepts.

3. GP organization with high standards.¹

1960-1969 — Development of the Concept of Family Practice and Approval of the Specialty Board in Family Practice. I would like to quote once again from the definition of Family Practice as stated in the *Willard Committee Report to the AMA*. "The Family Physician is one who:

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1. serves as the physician of first contact with the patient and provides a means of entry into the health care system;
2. evaluates the patient's total health needs, provides personal medical care within one or more fields of medicine, and refers the patient when indicated to appropriate sources of care, while preserving the continuity of his care;
3. assumes responsibility for the patient's comprehensive and continuous health care, and acts as leader or coordinator of the team that provides health services; and
4. accepts responsibility for the patient's total health care within the context of his environment, including the community and the family, or comparable social unit."²

1969-1973 — Development and Expansion of Family Practice Training. In an address before the Arkansas Academy of Family Practice annual meeting in August of 1969, I reported that our needs would include the four *f's* — funding, facilities, family, and faculty.

Funding — We have been most adequately supported. Although we have not always been certain what our needs might be far enough in advance to meet the two year budgeting period, our needs have been met. Initially a federal grant for the development of the medical school paid for the whole program. Both Baptist Medical Center and St. Vincent Infirmary have supported the house staff and have made space available to us for meetings and for our special Model Family Practice Office. The state appropriation which came out of the 1972 Special Session of the Legislature provided for equipment, space, supporting staff, and salary for seven full time Family Practice faculty. Those dollars are still there and have been supplemented by federal grants to assist the hospital budget and to promote the preceptor program.

Facilities — We are now utilizing over 4,000 ft. of a proposed 10,000 sq. foot wing at St. Vincent Infirmary School of Nursing. Funds were budgeted to pay a rental charge on the space we occupy at St. Vincent which is calculated at a very competitive rate. Although we are not crowded in terms of staff offices, the space requirements for a teaching program in order to turn over twenty plus patients in a half day (afternoon) indicate that we do need more examining rooms.

A facility with four examining rooms, a separate waiting room, record space, and doctors' and nurses' office is already under construction in the University Hospital adjacent to the present location. These increases plus the anticipated enlargement of quarters during the next school year will allow us to keep pace with our residency growth.

Families — The major portion of training and experience lies in the continuing care of families in office — medicine, pediatrics, psychiatry, and minor surgery. We have registered approximately 1,200 families over half of whom are active at the clinic, with an average family size (estimated at three) approximately 1,800 patients. This has been adequate for the present load of 16 residents, only three of whom are at the second year level. This need for patients will approximately double with fourteen second year and two third year residents July 1, 1973; however, we anticipate that the above mentioned expansion of space and location will provide an adequate number of families. Many family practice residencies place a limit upon the number of families a resident may carry so that he is better able to provide the depth of study which each family deserves and by which he may have time to better learn the system. This slow rate of growth of a fairly small number of patients appears to be adequate for the current goals of the residency program.

Faculty — This is where the competition and our need has been greatest. Every family practice department that I know of has a deficiency of experienced faculty members except those programs which do not have adequate budget. We have taken a temporary dip in the number of faculty from 3.0 full time to 1.4 full time equivalent which means we have a couple of people on 10% and 20% plus another 1.0 full time equivalent of part time people in other departments. I anticipate we will reach 7.3 FTE by July of 1973.

In developing the Family Practice Residency we have faced some difficulties the first of which is the uncertainty as to what our final program and ultimate goals must be. The philosophy of our program is, however, similar to that of other programs, and I would like to quote from a personal communication from Dr. Hiram Curry, the Chairman of the Family Practice Department at the Medical University of South Carolina in Charleston.

The central requirements for a Family Practice Department which were listed by him in 1969 were:

1. The creation of a Department of Family Practice representing the sixth major clinical discipline of the University Medical Center.
2. Membership or representation on the major committees of the medical school including the curriculum committee.
3. Funding comparable to that provided in the other departments.
4. Freedom within the curriculum to offer electives. (They offer elective courses to every class from freshman to seniors and are among the most favored courses available. With the addition of training programs in eight other hospitals of the state, they anticipate placing 50% of the graduating class of 165 in family practice training positions in the state of South Carolina.)
5. Underlying all of these individual requirements is the necessity for understanding and commitment to the concept of family practice training by the faculty. (Dr. Curry has guaranteed this would be affirmative through his long association with the faculty as a full time professor in internal medicine and neurology preceding his present appointment.)

In the objectives of his program he has stated the need to provide quality teaching and training, an objective we have echoed "to prepare a competent, qualified family physician for practice in the state of Arkansas." Dr. Curry goes on to say of the resident, "He must realize that he can not and should not attain the expertise in each field that his consultants can."³

Learning involves learning limits — physical, intellectual, and emotional. Mechanisms for consultation opinion and referral for management must be developed to support this new physician. I have been asked if our program will compete with physicians for patients. It appears obvious to me that the rate of productivity of a resident during his training will not allow a limited number of residents to compete with a larger body of well trained physicians. Just as surely the immediate graduation or termination of training of all the residents in the program would not solve the problems of health care delivery in the state of Arkansas.

It has been estimated in some family practice programs that six residents working with one faculty member can see half the number of patients that the faculty member could have in his individual practice. One can see from our present situation that sixteen residents working with one and a half faculty members are not seeing as many patients in five afternoons as most of you would be able to do. We must have access to good patients, normal patients, paying patients, a broad spectrum of types of problems in a controlled environment in order to produce a recurring graduating class of family practice residents.

There is one area in which I must compete with you. I still need five of the best family physicians that you have got for faculty positions. I suppose that there is a Roosevelt analogy to say "it's priming the pump", but we will not produce 20 to 25 or 30 family practice graduates each year until we have a faculty of seven, eight, or twenty including physicians with small town and urban general practice experience.

Section II — The Present

The definition of family practice residency is a training program in continuing comprehensive medical care including an adequate exposure to medical and surgical specialty skills as appropriate to the individual. The sine qua non for the family practice training program is one or more model family practices where the resident continues to see the same group of patients throughout his entire three year training period. This is a very important aspect to the national bodies, including the Residency Review Committee, for this is where the resident sees the kinds of problems which will make up his practice, this is where he maintains continuing contact with families over a period of time (Residency Review Committee says a maximum of three months away from this responsibility). This is the place where the Family Practice faculty has the responsibility and control for the standards of his care (records, diagnostic tests, and treatment program.)

The successes of our program to the present are very greatly the responsibility and are dependent upon the marked participation of community hospitals, medical school departments, and individual voluntary staff. During the current year Baptist Medical Center has taken thirteen trainees and St. Vincent Infirmary four.

Thirty-three months of training have been provided at Arkansas Children's Hospital and nine months at Little Rock VA Hospital. Every department at the University Hospital has opened their doors to us, and a number of residents have taken rotations at University Hospital — the most popular being dermatology, cardiology, and ob-gyn.

In the two community hospitals of Little Rock, approximately 120 physicians have contributed at least one month of their time to precept a family practice resident on the wards. We have about thirty family practice physicians on our voluntary faculty who have committed their time and interest to advising the program and helping us with problems as they arise. I would particularly like to recognize the following persons who leave their practice to supervise the residents in the Family Practice Office from one to four afternoons each month:

Rodney Baker, M.D. — Little Rock VA Hospital, Ed Barron, M.D., James Flack, M.D., Roy Harrison, M.D., Harold Hedges, M.D., J. B. Holder, M.D. — Little Rock VA Hospital, Kemal Kutait, M.D., Ken Lilly, M.D., David Luck, M.D., Robert McGowan, M.D., Benjamin Saltzman, M.D., William I. Wade, M.D. and especially Paul Wallick who worked with us for a year and a half and continues as Director of the Preceptor Project. These gentlemen have made it possible for us to operate the residency this year and have contributed a practical approach and a willingness to teach which the full time staff could not match.

In brief the program is growing as rapidly as can be allowed. The creation of new residency positions, the scattering of residents in three of four locations across the city and ultimately in ten or twelve locations across the state, the division of responsibility between inpatient and ambulatory care, the creation of new objectives and new standards — all of these factors place a stress upon us as individuals and upon the system of hospitals and faculties who have the responsibility for providing the training. We must maintain quality, but we can not be constrained by arbitrary or departmental limitations which do not recognize the need for meeting the problem in this fashion.

Every program has its problems. Much of the past twelve months has been spent in removing obstacles that limit the residents' ability to learn.

1. Objectives and Standards — We are trying to put into writing a philosophy, the type of care we anticipate the physician of the future will give, and our mechanisms and criteria for judging the quality of the residents' work. This will help to remove him from a confusing fog where he is wandering between the teachings of the medical school, the expectations of the specialty faculty, and the vague comprehensiveness of the Family Practice Office.

2. Automation and Assistance — We are increasing Family Practice Office Staff to three nurses, installing a computer processed diagnostic index which will give us more rapid feedback, arranging for automated laboratory services on a profile basis, hiring a social worker, and working with the school of nursing to develop nurse practitioners, all of which will provide input to the problem oriented record system producing more extensive data from which the resident can make his clinical judgments.

Family Practice team is one way of labeling this multidisciplinary group. The delegation of responsibility according to protocol will require (a) provision through training of adequate numbers and types of physician extendors, and (b) rational development of plans for division of responsibility in well defined situations. "John Geyman has discussed and illustrated protocols for team function."⁴

3. We are introducing a concern for the family group and the effects of the family setting upon management of illness. There has been bias among medical students against the psychosocial aspects of health care delivery. Dr. Eugene Farley has divided his Family Practice patients by neighborhood.

I have spoken and written of cultural influences on the patient and on the physician until some may think I have over-emphasized social-cultural factors. But we are moving toward a better understanding of our respective roles and how they influence our judgment and our priorities. A conscious awareness of such factors will allow us to control and compensate for

them as we already do with multiple factors in medical management.

4. Time for Feedback — The natural tendency of residents is to become more and more rapid in their work-up and evaluation of patients. While this is a desirable objective which I think we will attain by the completion of the residency, the more important one is development of the capability to analyze the data, criticize one's own records, and have a dialogue with an experienced faculty member about the pro and con of different diagnostic and treatment plans. We are not so busy at the present time that we could not be doing better work.

Growth of Program

There are very definite positive signs of the success of the Family Practice Program in Arkansas. The simplest is the increase in interest manifested by numbers of persons participating. This year we have resident applications from over fifty individuals, thirteen of which are members of the current resident staff continuing into their next year of training. The total resident staff will increase this year from sixteen to approximately thirty. We had eleven preceptors for six week clerkships for credit, and forty-two sophomore students have applied for a preceptor experience in the observation of family practice to be started this month.

Other Parameters

There are other programs at the University Medical Center which are not my direct responsibility but which also indicate the strength of the support for family practice. A newly organized Family Practice Club has met twice with fifteen to twenty members of the junior class and twelve to fifteen family physicians from out in the state to share their experiences about organizing practice, moving into town, the types of training one should seek, etc.

There are twenty-eight students receiving rural practice loans this year under the state program which was funded two years ago. Seven seniors, four juniors, and fourteen sophomores are included among those. A recent poll of students indicated that 220 out of 300 responding indicated some possibility that they might enter family practice or general practice as a career choice upon graduation.

The Medical Center newspaper *Medico* published last week a very informative map and chart relating the distribution of physicians and the need for physicians throughout the state. This is part of an overall plan to inform the students of the medical needs of the state so they may make the most logical and informed decision about the location and type of practice which they choose to enter.⁵

What has been included in the program now? Who is our graduate? What is the graduate capable of? What would he be allowed to do? The answer to the last two questions depend upon the graduate and the staff rules of the hospital where he practices. We are producing a physician who will be able to adapt his practice to his location, who will in fact adjust his electives in the residency to prepare himself to meet his practice goal.

Every resident has a minimum of two months of Ob with the opportunity for 0-9 months elective. To include Obstetrics in one's practice requires experience in emergency gynecology—caesarian section, ruptured ectopic, coagulation defects, etc.

Every resident has a minimum of two months of surgery with the opportunity for 0-9 months elective. Intensive care and respirator care are included. Every resident has a minimum of seven months of medicine with the opportunity for 0-6 additional months of elective. Cardiology, pulmonary, and gastroenterology are frequent electives. Every resident has a minimum of two months of pediatrics with the opportunity for 0-9 additional months of elective. Every resident has a minimum of three months of emergency service and trauma with some experience in emergencies during nine months of ambulatory experience scattered throughout the three years. The requirements stated above make up twenty-six months of general criteria, i.e. general medicine, general and special surgery, general pediatrics, and the remainder is elective. Psychiatry is not required as a block rotation, but we are making serious effort to include the emotional aspects of illness and the psycho-social aspects of patient management in the Family Practice Office and later within seminars and special rotations for Family Practice residents in psychiatry. The resources available through Dr. Reese and

Dr. Robert Matthews seem ideally suited to these objectives. We are focussing on:

1. Common conditions
2. Preventible, treatable conditions
3. Life threatening or "red flag" emergencies

We are going to place a strong responsibility on the resident to seriously consider not only the type of practice but the life style which he is about to enter. The resident has responsibilities to many people including (a) himself—for self satisfaction, leisure, time to study, and time to relax, (b) his wife—who married an individual and not a machine, a person who can support the physician but who also needs the satisfaction of his awareness and love for her, (c) his children who need a father. Our concern for the family unit does not stop with the patients we are treating but involves the healthy relationship which prevents the broken home and provides emotional support for developing children. (d) his community—the physician continues to be a community leader by his capabilities although the demands upon his time will not allow him to participate in all things as the doctor may once have done. (e) His profession. The responsibility to maintain standards and quality of care, to participate in management decision at the office and hospital level as well as on a regional or community level demand that our physicians prepare themselves to set priorities, to allocate their time, and to maintain contact with continuing education opportunities throughout their practice life.

One part of this life study is in preceptorship. The resident may elect two or three months with a group or physician in a situation such as he will enter in practice. Then he returns for more training with a new view point on the responsibilities and stresses.

Section III — The Future

A. Residency — The presence of a full and viable training program for family practice (which will be coordinated with undergraduate medical education) ultimately leading to the production of thirty to forty-five board-eligible resident graduates each year, would go a long way toward improving the health care delivery system of the state. The residents will have a broad medical background deriving from exposure to training in multiple medical

specialties through the sponsorship and direction of a University department and training program. Their continuing contact with and responsibility for the medical care of a panel of patients throughout the three years of residency will provide them with opportunities for developing appropriate concern for their patients, organizational ability to develop a practice structure which will best utilize their time, and knowledge for the best continuing, comprehensive medical care for their patients and families. The provision of adequate numbers of graduates, trained to work in partnership with other family practice residents, is expected to lead them naturally into clustering their practices, in order to share overhead, coverage, and medical knowledge.

This year for the first time we will have second and third year depth equivalent to our first year or inexperienced trainees. This will greatly change the mechanism for call schedules and the amount of emphasis placed on ambulatory care. The responsibilities of the second and third year residents will shift away from the hospital toward the office and other forms of ambulatory care. The number of personnel available will allow us to back up the first year resident with someone who is able to help him in the hospital each night of call. It will provide us with a pool of personnel from which to draw elective time. The entire complexion of the program will change.

Numbers of Graduates. A lot of people are concerned about when the Family Practice Program, when the Medical Center expansion are going to bear fruit. It is not going to be this year, but the mathematics of it are simple and straight forward.

Extensive planning reports have been submitted to the Office of the Vice-President at the Medical Center to expand the Family Practice Residency along with the expansion of medical students. The major direction in which this expansion will occur is through the participation of regional medical centers called AHEC's, Area Health Education Centers.

Two of the current residents will complete their training in June 1974. Approximately twelve would complete training the following year. 1976 might bring the first graduating class of a full compliment of of twenty. With the addition of more training capabilities including ward space and faculty in Little Rock, the residency might expand to thirty, first graduating class in 1977 or 1978.

Area Health Education plans are devised for a residency staff of twelve, four at each level, and the first eight might graduate in the summer of 1977 or 1978. By 1980 we might anticipate a graduating crop of Family Practice residents of between forty-two and fifty four each year, which approaches one-third of the expanded Medical School class of 170.

There are supply and demand factors, push factors and pull factors which will determine whether this happens. *On the push side* are the following: There appears to be an increased interest among college students even at the freshman level in professional careers including medicine. These increased applicants should meet the Medical School at a time when the increased positions are available.

Increased Funding. There is no way to expand the services or multiply the capabilities of the present faculty without increased numbers and merit and cost of living increased in pay. New facilities will be needed for those capabilities that do not already exist elsewhere. Specifically, medical school basic science laboratories must be expanded. Efforts are being made to introduce flexibility into the curriculum allowing for better utilization of those spaces. New facilities in clinical science must be concentrated in ambulatory services. I see no way that we can train a physician to be the best in ambulatory care without ambulatory care settings. Family Practice Offices, rural health centers, a clinical teaching center are only stages where the faculty and students can act out the changing emphasis from horizontal patients in beds to vertical patients in ambulatory practice.

Pull Factors — The communities of the

state of Arkansas are well aware of their needs. I have seen recent signs of improvement in their ability to communicate that need through letters, through advertisements, and through personal contacts to the medical students and to the residents. Financial considerations are important. It appears to me that the "single region" decision on Medicare will have the effect of stopping the undesirable penalty which was placed on the physician who chose to practice in an understaffed area. The satisfaction which the physician receives from his practice must be guaranteed. Developing the patient-doctor relationship is important. Quotes and ceilings and restrictions and assignments will not solve that problem.

The Medical School stands between these push factors and pull factors and has the responsibility for translating them to the student. It will require changes in programs, shifting of emphasis and interest, adoption of new settings for the teaching of primary care, and setting of new standards for the evaluation of primary care. I see nothing mediocre in stating a goal of preparing physicians for the type of care that is needed in the communities of our state. I can not see that factual knowledge is sacred unless it is accompanied by the capability of delivering quality care.

Family practice can not be judged by hospital or specialty standards, but I will have to defer on how it should be judged (we will have to design systems to do that evaluation.)

The improvements which are going into the residency at the present time are the (1) development of written objectives, (2) criticism of our standards of care, and (3) protocol for team function. We have discussed many times the type of physician needed and the general principles involved in producing a family doctor. The residents themselves and many of the participating faculty are not entirely clear on what is expected of the training program. Dealing with a large number of teachers (including a high percentage of volunteers) we have no consensus for determining the end point of training if there is one. We are at this point putting into writing the

general objectives of care in the Family Practice Office. We have a great need for new full time faculty members to work with individual specialty departments to define standards within those areas. In the meantime we are borrowing and copying objectives that have been developed in other Family Practice programs. These will have to be circulated, criticized and revised before they will represent a final product.

The standards for care in the Family Practice Office relate to the type of problems we see and the quality of care that we expect our residents to provide. Our spectrum of problems has not been shown well. A problem oriented record provides a good way to look at the single problem in the context of the total problem list. There is more to standards of care, however, than writing nice progress notes. Records can get out of control.

I believe that the problem oriented record offers the opportunity to convert fragmented episodic care to comprehensive continuing care. It justifies and assists in the management of a single problem; but it places that problem within the context of the list of continuing problems. Common problems occur commonly, and common problems require quick, efficient, economic care. Rare diseases occur uncommonly. Few papers study the cause and course of frequent problems such as children's respiratory illnesses.⁶ The complications which are seen require greater detail and specificity. Because of the nature of primary care, it is proper for the family physician to proceed in steps from the common to the complicated. The steps will be documented in the problem oriented record so that we can better analyze which steps are wasteful and which are productive.

The problem oriented record will make our exams better unless we recognize from our analysis of our own records that we need better recording of more reliable (accurate) findings in order to justify our conclusions (clinical judgment.) This analysis by faculty and residents will take time and is not a step that can be omitted from the training program.

The debate on problem oriented records continues, the *New England Journal*, March 22, 1973, presented an article and an editorial response pointing out once again that the problem oriented record is merely a vehicle for developing good clinical judgment. The development of standards and the auditing of problems is the responsibility of the faculty.⁷

We must define and are defining at this point what data and format we expect to see in every record. We have recently purchased and are participating in a computerized diagnostic index which will tell us the frequency of certain problems we are seeing. We will then ask our consultants to review some of those charts and to recommend to us ways in which the care should be improved. A standard protocol will be developed for those standards which have been accepted by the faculty. The clinical judgment of the resident will be compared to the protocol excepted. Portions of the protocol will be delegated to nurse practitioners and other personnel for evaluation and for patient management.

Our single Family Practice Office is being expanded into three units. Family Practice admissions are available in two hospitals and additional privileges are being developed wherever we have residents. The Division of Family and Community Medicine of the School of Medicine will become a department within a few months. We are developing liaison persons in surgery, ob, pediatrics, orthopedics, and psychiatry. We have maintained such a relationship with psychiatry for two years; we almost hired an individual half time with the Department of Obstetrics this year, and the filling of a joint position with the Department of Pediatrics is pending. These representatives will be consultants to our program and will also have the responsibility of working with their departments to further improve the family practice experience.

Dr. Hiram Curry, who is the Chairman of the Family Practice Department at the Medical University of South Carolina,

speaks from a position of strength. In his address to the Council on Medical Education February 6, 1972, he stated that the medical school faculties are responsible for teaching and not for delivering health care to the whole population. Nor can they be the ones who decide who will deliver it or how. The public has the right to seek certain services, the faculty's job is to prepare the students who wish to meet that need through practice.⁸

We will not reduce our standards in order to meet this end. We will state our objectives, and we will participate in a continuing dialogue with the other departments in order to identify those common problems which are frequently seen by the family physician and which can be managed in primary care both ambulatory and in hospital. We will identify problems which require specialized care and develop screening techniques to identify those patients who will benefit from referral and consultation.

We do not at present know the one best way for family practice training. Different programs have different systems and different emphases, but we can not wait for proof. Dr. Curry has used the analogy of violin making (which happens to be his hobby). Nicholo Amati, 1596-1684, was a noted violin maker. His pupil, Antonio Stradivarius, 1644-1737, was better. It is highly unlikely that either of the two masters could have put into words the skill, the technique, the quality that went into their work that made violins which are famous still today. And furthermore the process of maturing of the violin called "playing-in" requires twenty-five to forty years. The final quality of the instrument can not be judged prior to this time. How many violins would either of the men have finished if they had waited for results, proof, confirmation, before continuing their methods or changing to a new one?

Margaret Mead has said that our educational institutions must prepare some people for what no one knows yet. The book *Future Shock* written by Alvin Toffler has painted a vivid catalogue of the many,

even myriad factors in our future.⁹ The spectrum of family practice is not simple. It is extremely challenging. Our best efforts in teaching and our best efforts in evaluation will be needed.

- B. Let me turn aside from the discussion of the residency now to comment on two other aspects of the department. *Undergraduate programs* have received little attention. We have produced as yet no meaningful *research*. I see some goals in both areas.

Electives—First we need additional contact with the students earlier in the curriculum. I believe that every student would benefit from this contact, but when the faculty is of sufficient size and the residents of sufficient maturity, we need to make available to some students electives, through which they can visualize their participation in the future. One step toward this is the guaranteeing of free time or elective time to every student from the first year through the fourth. Some departments see this as an additional whittling away of their student time. Others will see it as another opportunity for the students to goof off. I believe the students are mature enough to cope with this responsibility if allowed to do so. My experience with the senior students on elective is that they choose quite critically between the Family Practice Acting Residency and the other electives which are open to them. Simply because the medical student has had no choices from the time he graduated from college until he reaches his senior year does not mean that he is not capable of making those choices.

AHEC's—Teaching in the regional centers of our state will be different from teaching in University clinics, and it should be. It is adjusted to local problems, it is shaped by local philosophies, it recognizes community and personal resources. The Area Health Education Centers will not open tomorrow, "springing de novo from Jupiter's brow." Many months and perhaps years of organizational activity—a firm commitment on the part of a number of professionals who will hold full time positions as directors, chiefs, and professors

will be needed before those programs will be as far along as the family practice program which I have described. I believe it is an important development, it is a worthwhile objective, it is absolutely essential to the training of additional students and additional residents.

Community Medicine — We have relegated community medicine to a minor position. Perhaps I suppressed any potential there lest it threaten the family practice program. I believe that there is a great need in our medical school to develop a meaningful curriculum in Community Medicine. I have only a dilettante's understanding of public health and community medicine. We need a well qualified person with degrees and experience which are appropriate to make him the chairman of a division within this department. He should have the opportunity to provide courses and electives for all students, and he will have to provide input to the family practice residency to make it stronger.

Research — We expect to have feedback on our patient profile in a few months. We have started an outgoing survey of student attitudes with particular reference to how the preceptorship influences them. The evaluation of our residents in their performance in the office will focus our attention upon problems of behavior of patients and of residents. Cooperative audits with physicians in the state have a great potential.

Summation

Ultimately our future standing within the Medical School depends upon several factors:

- A. The achievement of our goals in distribution and quality of health care. A quality program in family practices is essential to that goal within the Medical Center, and that goal is an essential part of the Family Practice Residency.

- B. *Evaluation of the training we provide.* With our written objectives in hand, we must then look to our residents to see if we are meeting those objectives. It requires more paper work, it requires more faculty time. We will not prove our point until we have done it.
- C. *Contributions to knowledge through research and innovation.* Our ideas are not new, merely a new combination. Our methods are unproven. Problem oriented records and physician extendors may be part of the solution, but certainly the graduates of a family practice residency are.

I wish to thank you for the opportunity to address you. I hope to find many of you visiting and contributing to the Family Practice Program in the future.

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Office Orthopaedics

The Physician and the Novice Skier

R. Barry Sorrells, M.D.*

Skiing is one of today's most rapidly growing participant sports the world over. During the past decade this addictive sport has enjoyed a twenty percent growth rate each year, and it is now estimated there will be over twelve million skiers in the United States by 1976. This pleasurable diversion offers many benefits including an opportunity for complete physical and mental exercise. Here is a sport that enables one to communicate with nature and derive real pleasure from the scenery, fresh mountain air, and bright sunshine. Skiing also provides the individual with a personal challenge and the opportunity to excel. The skier strives to better his previous form, style, and performance. And, though it is not a highly competitive sport, there is a great sense of personal competition and gratification as the novice and even the expert skier continues to improve.

Skiing, however, is not without hazard. For many people, to think of skiing is to imagine a broken-leg-by-the-fireside. Surely though, it is not as dangerous as most would believe. Most accomplished skiers realize the dangers but certainly do not dwell upon them, as they are aware that the majority of accidents occur in the improperly-prepared-beginner and overly-confident-expert categories. The conditioned, properly instructed and outfitted beginning and intermediate skier is relatively safe from danger. Indeed, getting to the ski area by automobile is the most dangerous part of the average skier's day. The risk of fatality is minute. More people die watching football games each year than die skiing.

The fact remains, however, that 225,000 skiers were injured last year. This all-inclusive accident statistic approached one percent per day. Most of these injuries were minor, and nearly all preventable.

As skiing comes to areas in the South, travel expands horizons, and more and more people are exposed to a new and potentially dangerous sport, the roll of preventive medicine becomes increasingly important to us all. The physician should be able to counsel the novice skier with a few basic precepts.

A well informed and concerned parent would not allow his child to participate in contact sports without prior physical conditioning. Few, if any, non-swimmers would attempt to swim without a teacher. Most individuals would not drive an automobile without some knowledge of the mechanical safety of the vehicle. Yet, these same, usually cautious, people often attempt to negotiate the ski slopes without physical conditioning, proper instruction, or adequate safety equipment.

The physician counseling the novice skier should encourage a program of: (1) Physical Conditioning; (2) Knowledge of Technique; and, (3) Availability of Proper Equipment.

Physical Conditioning

It is erroneous to believe that one can safely ski himself into shape. Skiing is a strenuous, demanding sport. It requires strength, flexibility, endurance, skill, and coordination. Balance, proper timing, and agility are other factors which contribute to the perfection of motor activity which is epitomized by the talented skier. Most

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of these qualities, however, can be developed in even the most sedentary individual if he is properly directed, motivated, and willing.

The most stringent demands of skiing are placed on the cardiopulmonary and musculoskeletal systems. The single most important conditioning exercise which builds these systems is running or fast jogging. Bicycling, swimming, and even tennis are helpful, but for the time spent in exercising, nothing is superior to running.

Proper cardiopulmonary conditioning provides endurance and hence a greater enjoyment of the sport. A program of regular running with gradually progressing distance and endurance is invaluable in improving the cardiopulmonary system.

Musculoskeletal exercises concentrated on the legs and arms are most important. Running, half-knee bends, and calf raises are indispensable leg exercises for any conditioning program. Many sprains, and even fractures, are prevented by adequately conditioned legs. Push-ups build the triceps muscles — necessary for use of the ski poles. All of these exercises should be progressively increased on a regular daily basis.

Any conditioning program must be just that — a program. Duration must be sufficient to adequately exercise the system. Consistency must be adhered to if real value is obtained; otherwise, the activity is only a diversion.

And, lastly, but no less important, is the necessity of ideal body weight and proper diet.

Knowledge of Technique

This can be obtained either through study and reading, or from a competent instructor. There are many instructional books and articles available for the beginning skier and most ski areas offer professional instruction. While there are several different skiing techniques popular at the present time, most favor the U. S. technique or the GLM (Graduated Length Method) technique. The U. S. technique is the resulting combination of the best of many methods. The GLM technique which is currently popular starts the new skier on very short skis and progresses him to longer skis as his ability improves. Proper skiing technique is easily learned and not nearly so complicated as one would initially

believe. There are certain errors, however, that all beginning skiers will make, but with proper instruction these errors can be prevented, and safer and more enjoyable skiing will result. A competent skier is not necessarily a competent instructor. Time spent with a good ski instructional book, or preferably a professional ski instructor, is certainly superior to time spent with an over-zealous skiing friend in most cases.

Availability of Proper Equipment

Great changes in equipment have occurred over the past 15 years in skiing. While undoubtedly due in great part to commercialism, far greater safety is nonetheless now possible with modern equipment.

The clothing need not be complicated nor expensive. Warmth is important, but can be overdone. The dress should be appropriate to the temperature, and consideration must be given to the fact that significant body heat is generated with this activity (especially in the novice). Clothing should be close fitting, but not constricting. Shiny slick fabrics should be avoided, as these have insufficient friction to stop the fallen skier's progress down the hill. Gloves are essential and sunglasses necessary on most days.

Ski boots must be properly fitted, adequately waterproofed, of proper size to insure a snug but not constricting fit, and comfortable while skiing. They are rarely comfortable when walking, but then this is not their purpose. One should be able to curl the toes inside the ski boot, but the foot should not move excessively as this will cause blisters.

Safety-release ski bindings are mandatory. There is no place in Alpine skiing for a ski without a safety-release binding. The ski bindings vary considerably in design, complexity, and cost. A ski binding that will release the boot from the ski at the proper time (neither before nor after the proper time) is necessary. The workings of the bindings should be understood by the skier and should be tested each morning prior to skiing to insure that the binding will release when sufficient stress is applied to the boot. The fulcrum of the long ski can easily break a leg in a rotational injury if the binding does not release the boot from the ski. The novice skier should insist on proper instruction

from the salesman or from the rentor as to the function and adjustments of the binding. Proper skis and poles are useful to the novice skier, but not nearly as important as the other equipment mentioned. The importance of the skis increases as the skier's skill increases. Generally, the beginning skier will find it much easier to manage a relatively short ski, with a gradual increase in length of ski as his ability progresses. Most modern skis are of fiberglass or steel construction and breakage is no longer a significant concern to the novice skier. The poles can be dangerous if improperly held and the user should be aware of the proper grip to prevent injury to the thumbs, wrists, shoulders, abdomen, chest, or face.

As mentioned, skiing is a rapidly growing sport, and one pursued by more and more people every year. The person who takes a mature approach to learning this sport will more than likely prevent injury, and will undoubtedly enjoy his experience. Certain factors should be considered and carried out for proper and safe

skiing. The physician can help prevent ski injuries and enhance enjoyment by proper counseling of the novice skier.

The following eight items have been suggested by the American Academy of Orthopaedic Surgeons Committee on Sports Injury: (1) Adopt an exercise program to tone up legs and heart, and to increase wind; (2) If a beginner, take enough lessons to learn fundamentals of skiing; (3) Select good quality boots that fit properly; (4) Use only skis that are appropriate for height, weight, and skiing ability; (5) Use reliable release-type bindings suited to weight and ability; have the bindings adjusted periodically and check them regularly; (6) Always ski within individual ability in the prevailing slope and snow conditions. Never ski in a manner that will cause loss of control; (7) Be cautious and courteous at all times on the slopes and in the lift lines; (8) Stop skiing at signs of fatigue; and (9) Wholeheartedly recommended by all skiers — *Have Fun!*



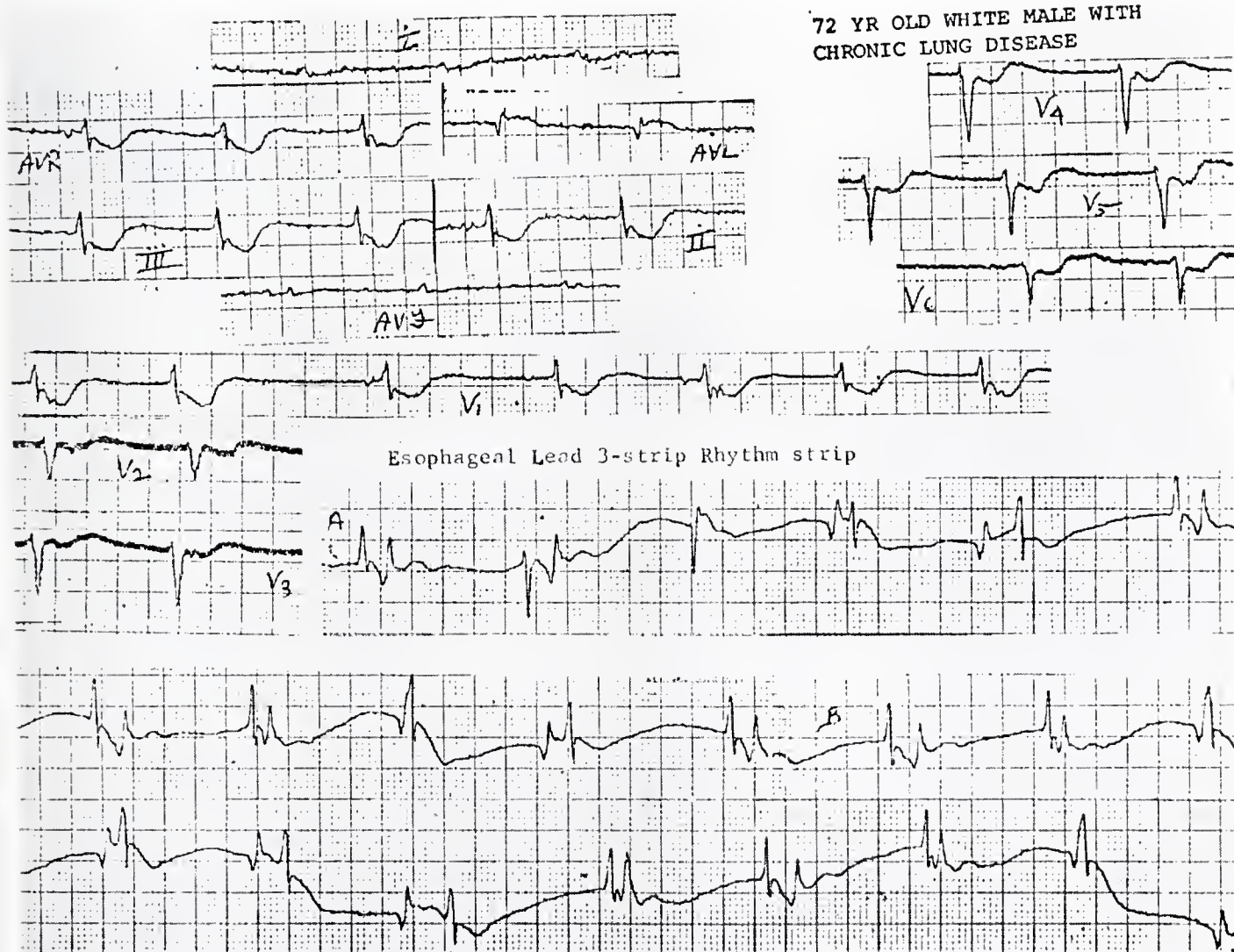
ELECTROCARDIOGRAM



OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 257)



72 YR OLD WHITE MALE WITH
CHRONIC LUNG DISEASE

J. Douglas

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Immunization Activities

Phillip H. Farrington*

The control of communicable diseases by man has been dependent on his ability to modify his environment, to regulate his own activities and to increase his specific resistance to these diseases. Progress has been made in all areas, and the incidence of some diseases has been reduced to a point approaching practical eradication.

The use of immunization agents to increase man's specific resistance has played a prominent role in our effort to control communicable diseases. The routine use of diphtheria toxoid, tetanus toxoid and pertussis vaccine (DTP) during infancy has dramatically reduced the incidence of these diseases. The intensive administration of first Salk polio vaccine and then oral polio vaccine had an even more dramatic impact on the incidence of poliomyelitis. Equally dramatic results have followed the introduction of measles and rubella vaccine.

The effectiveness of vaccines to induce specific resistance in a very high percentage of recipients has been demonstrated and continues to be monitored. This is not the issue we wish to discuss, but rather that any vaccine is useless until it is administered to a susceptible individual. Therefore, the greater the number of recipients of a vaccine, the more effective it becomes in fulfilling its role to control a specific disease.

Today, we have evidence of a disturbing trend of complacency toward immunization which is reflected in a decline of immunization levels against polio, diphtheria, tetanus and pertussis. The decreasing incidence of these diseases undoubtedly is directly related to this complacency. Thus our immediate problem is to overcome this complacency. The objective being to increase public awareness and to motivate parents to have their children receive adequate immunizations.

The "Every Child by '74" campaign is intended to fulfill this purpose. This massive pro-

motional and informational effort is designed to stimulate parents to review their children's immunization records and to correct immunization deficiencies. The weekend clinics on September 8th and 9th were only one phase of this campaign. It is intended that parents should seek immunizations for their children from the provider of their choice. We have experienced a significant increase in attendance at regularly scheduled public health immunization clinics. We would anticipate that you also have experienced a similar increase in your practice. The immunizations given in regularly scheduled clinics and in private practice are the real hope for achieving and maintaining the desired, high immunization levels.

In April 1973, the Arkansas Department of Health conducted a selective sample survey of 1,286 children at 20 months of age. The results of this survey are summarized below.

POLIO	D T P
14% with 4 doses	32% with 4 shots
37% need 1 dose	46% need 1 shot
29% need 2 doses	8% need 2 shots
13% need 3 doses	8% need 3 shots
4% need 4 doses	3% need 4 shots
3% unknown	3% unknown
MEASLES	RUBELLA
62% immunized	60% immunized
38% not immunized	40% not immunized

At the age of 18 months a child should have received four doses of oral polio vaccine (OPV) and four doses of DTP. (This was the rationale for selecting 20-month-old children for the survey.)

The United States Bureau of the Census conducts an Annual Immunization Survey for the Center for Disease Control, U. S. Public Health Service, Department of Health, Education, and Welfare. When we compare our data for 20-month-old children with the data from the 1972 national survey for the age group from one through four years of age, we find that the levels

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are quite compatible. This tends to confirm the validity of our survey, but also indicates that few children are receiving OPV and DTP between 20 months and five years of age. Thus, children who are not adequately immunized by 20 months of age, probably will not be immunized until they enter school.

In the "Immune Status of Children One to Four Years of Age as Determined by History and Antibody Measurement," New England Journal of Medicine, Vol. 289, No. 5, August 2, 1973, Eli Gold, M.D. and associates, reported a

study of four census tracts in Cleveland, Ohio. They found that 57 percent of the children had serum antibody levels of less than 10 to one or more types of Poliovirus. Many had low titers despite having received the recommended number of immunizations. They emphasize the need to immunize all preschool children and recommend periodic reimmunization. The need for a fourth dose of OPV during the second year of life and a fifth dose at four to six years of age are critical to inducing high antibody titers to all three types of poliovirus.



EDITORIAL

Emphysema

Alfred Kahn, Jr., M.D.

A vast amount of literature is being published on emphysema; much of the impetus is related to the recognition being given the "clean ecology" programs. However, the relationship of environment to the inception of emphysema is not clear — despite the fact that dirty air aggravates emphysema.

Stein, Leu, Welch, and Guenter (Circulation, Vol. III, p. 227, Feb. 1971) have studied a group of patients with Alpha₁ anti-trypsin deficiency; it has been known that these individuals are emphysema prone. They were particularly interested in emphysema in these patients because it was anteceded by bronchial asthma, bronchiectasis, and chronic bronchitis; through study focused on the relationship of "pure" emphysema on the vascular tree of the lung to try and establish why emphysema patients get pulmonary hypertension and cor pulmonale. They studied five patients using wedge arteriograms, pulmonary arteriograms, right sided hemodynamic studies, and pulmonary scintigrams.

The pulmonary wedge arteriograms showed a decreased number of vessels, less than one mm. in diameter in the lower lungs. Pulmonary arterio-

grams demonstrated a prolongation of the time required to fill the large vessels in the lower lung zones; the arteries were said to "appear pruned." Pulmonary scintiscans showed decreased perfusion in the lower lung zones. Pulmonary artery pressure was elevated; the cardiac index was normal. Pulmonary vascular resistance was increased. Right ventricular work was increased. Pulmonary arterio-venous shunts were demonstrated. In several of these patients radioactive xenon ventilation studies were run and they indicated poor ventilation in the lower zones; this contrasts with most patient's obstructive lung disease. The patients with Alpha₁ antitrypsin deficiency demonstrated pulmonary arterial spasm; the elevated pulmonary arterial pressure could be reduced to administering oxygen. The authors feel that the cause of the pulmonary hypertension and increased pulmonary resistance in these patients is due to a decreased vascular bed; pulmonary hypertension is partially due, also, to vaso-constriction. This type of emphysema is different from that accompanying chronic bronchitis, etc.

The pneumoconioses have long been suspended

as having a relationship to emphysema but it has been unclear. Ryder, Lyons, Campbell and Gough have reviewed this association (Emphysema and Coal Workers Pneumoconioses, British Medical Journal, Vol. 2, p. 48, Aug. 29, 1970). These authors studied 247 coal miners over a twelve year period; they all lived in a small area and were examined during life. They all had post-mortem examinations. In this group, pneumoconiosis was considered the primary cause of death — often in association with other respiratory disease. An additional 5% of these patients had significant pneumoconiosis although they died of other causes. There was much more emphysema in coal miners with simple and complicated pneumoconiosis than among a control group. It is of incidental interest that the ventilation defect as measured by forced expiratory volume correlates well with the pathologic studies using the "counting" method on paper mounted lung sections. Ryder et al further state that in these pneumoconiosis cases the radiological finding of a fine punctate pattern of disease was the type that showed the most extensive emphysema.

"Exercise Performance In Relation To The Pathophysiologic Type of Chronic Obstructive Pulmonary Disease" is the basis of Marcus, McLean, Duffell, and Ingram's report in the American Journal of Medicine (Vol. 49, p. 14, July 1970). They studied three groups of patients: Group A with predominantly emphysema, Group B predominantly chronic bronchitis, Group C a mixed group. They studied these groups to determine if the failure to get enough oxygen for the body's needs was due to poor ventilation, poor pulmonary exchange, or inadequate cardiac output. Group A cases were selected on the basis of reduced elastic recoil; Group B cases had elevated resistance to quiet breathing, but normal lung recoil; Group C consisted of cases having mixed disease. In the 25 patients examined by Marcus et al they concluded the following: The most severe impairment of exercise performance is in Group C the mixed emphysema and chronic bronchitis group; Group B with chronic bronchitis have exercise impairment due to insufficient lung bellows action; Group A consisting of patients with emphysema are exercise limited due to inadequate alveolar capillary surface for gas exchange.

Obstructive disease may affect the small airways. Macklem, Thurbeck, and Fraser (Annals of Internal Medicine, Vol. 74, p. 167, Feb. 1971)

studied these cases because they felt that overproduction of mucus in large airways did not explain the faulty gas exchange in the lung parenchyma. Their studies indicated a diseased condition of the airways 2 mm. in diameter or less. The x-rays of the lungs in these functional studies revealed reduced vital capacity due to gas trapping. There was no loss of elastic recoil. The pathological specimens all showed inflammation of the small air passages; this was associated in some with mucus plugging bronchiectasis, peribronchial fibrosis, and irregular dilatation.

Kinships having a high incidence of emphysema have led Larson, Barman, Kueppers, and Fudenberg to investigate the "Genetic and Environmental Determinants of Chronic Obstructive Pulmonary Disease" (Annals of Internal Medicine, Vol. 72, p. 627, May of 1970). This was conducted at the Fresno General Hospital, where the emphysema cases were identified; their spouses were used as controls; siblings and children of the emphysema cases were studied to determine the presence of emphysema; they studied 86% controls and 156 relatives. It was found that obstructive pulmonary disease was present in 23% of the relatives and only 9% of the controls. These abnormal relatives were clustered in only ten family fragments — adding further proof to the suggestion of a genetic determinant. Larson et al found in this series that "the increased familial prevalence of chronic obstructive pulmonary disease found in this study could not be explained by a genetic deficiency of Alpha₁ anti-trypsin". They conclude that familial chronic obstructive pulmonary disease may exist with or without Alpha₁ anti-trypsin, and probably without the antitrypsin deficiency in the less common form. Tobacco smoking was associated with pulmonary function abnormalities and the reverse tended to hold true; thus, smoking appears to be a determinant in chronic obstructive pulmonary disease. The authors reviewed their data to see if negroes were as susceptible as whites to emphysema; based on a small series, here, it appears that negroes are less susceptible.

Emphysema kills by attrition and its course is long enough so that if it could be recognized and the process stopped early in its course, many lives might be saved. It should be a fruitful field for further intensive research as measured in terms of saving life.

M E D I C I N E I N T H E



THE MONTH IN WASHINGTON

William I. Bauer, M.D., has resigned as director of the controversy-ridden Professional Standards Review Organization (PSRO) program, expressing dissatisfaction with the PSRO organization setup.

The surprise step-down was a shock to the top officials at HEW who have been reeling from the loss of other high officials upset over the lengthy reorganization of the health activities at the HEW department.

Charles Edwards, M.D., Assistant HEW Secretary for Health interrupted a planned business retreat to hurry back to Washington when news of the resignation filtered out. He called a news conference but then cancelled it after the reporters had shown up. Dr. Edwards was in conference with HEW undersecretary.

The PSRO program is a particularly sensitive one to be subject to the inevitable repercussions and criticisms that follow a resignation. Members of the Senate Finance Committee have been taking a hard line on involvement of state medical societies in the PSRO review of institutional care under Medicare and Medicaid. Some physicians' groups and state societies, and the PSRO advisory committee, have urged a broader authority for state societies. In general, HEW and Dr. Bauer had appeared to be attempting a middle course.

Furthermore, the gearing-up for the intricate and complicated program has been a mammoth task for Dr. Bauer.

The 48-year-old Dr. Bauer was named to the PSRO post last March after a career as a practicing internist in Greeley, Colo. Other HEW officials who have resigned in the past several months are Gordon McLeod, M.D., director of the Health Maintenance Organization (HMO) program, and Arthur Lesser, M.D., head of Maternal and Child Health Services.

In a statement, Dr. Bauer said the administration has made a "significant commitment to PSRO but that commitment has not been translated into action . . ."

"This extremely complex program with ramifications at all levels of medical care has been provided with limited resources and those resources that were made available could not be effectively administered and utilized because of the organizational structure," Dr. Bauer said.

According to an HEW spokesman, the resignation stemmed from a dispute between Drs. Bauer and Edwards over organizational control of the PSRO program. Dr. Bauer was said to believe that he could not exert meaningful authority under the present setup in which much of the field work for PSRO, involving hundreds of physicians, would not come under his line control but under the Bureau of Quality Assurance. Dr. Edwards, the spokesman said, contended that Dr. Bauer would still have the say-so, but Dr. Bauer obviously disagreed.

Underlying the dispute, apparently, has been the effort of Dr. Edwards to pry PSRO control away from Social Security and Social and Rehabilitation Services, present overseers of Medicare and Medicaid, and to give the Health Department clear jurisdiction in PSRO.

Under the reorganization, 50 physicians at Social Security and 150 in the Health Services Administration are assigned to PSRO but not directly under Dr. Bauer who had 36 staff positions.

There was no indication from Dr. Bauer of any philosophical differences with the administration over how PSRO would function at the local and state level.

* * * * *

The House has approved legislation that will provide federal funds to start a limited number of experimental Health Maintenance Organizations over a five year period to the tune of \$240 million. The Senate's version of HMOs, passed months ago, would provide \$805 million over the same period. House and Senate conferees must now resolve the differences.

The compromise bill voted by the House calls for spending \$60 million this fiscal year, the Administration figure. The bill meets many objections raised to the original measure by the Ad-

ministration and the American Medical Association.

Though no specific number limitations was set in the House bill, the limit of authorizations to \$240 million will provide an effective ceiling on the number of HMO's which could be established. The House Commerce Committee estimated the legislation would be used to bring to the operating stage approximately 100 new HMO's.

The bill has a flat five-year cut-off for the HMO program.

Unlike the Senate bill, the House legislation does not pre-empt state laws that restrict formation of HMO's. The reason given by the House Commerce Committee was "the rapid change already underway in state legislation designed to remove these barriers." Approximately 20 states have already adopted legislation specifically authorizing HMO's.

The bill limits grants or contracts for planning and initial development costs by prohibiting this assistance after 1976.

Initial development assistance would be prohibited after 1977.

Loans and loan guarantees for initial operation costs are authorized except that loan guarantees could be provided only if the HMO will serve residents of a medically underserved area.

The bill has no authority for loan guarantees for construction projects.

For grants and contracts for feasibility studies, initial planning and initial development costs, the bill would authorize \$40 million for fiscal year 1974, \$45 million for fiscal year 1975, and \$50 million for fiscal year 1976. In addition, it would authorize \$55 million for fiscal year 1977 for grants and contracts for initial development costs. The bill would authorize \$20 million for fiscal year 1974 and \$30 million for fiscal year 1975 to be appropriated to the loan fund.

The bill unlike the original subcommittee bill, has no authority for demonstration grants and contracts for enrollment of the indigent, for providing service in rural medically underserved areas, and for enrollment of high risk individuals. There also is no authority for special projects grants and contracts, for grants for HMO management training, and for program evaluation.

Provisions for protection against insolvency of HMO's, against the cost of providing unusual amounts of health services or of providing out of area health services, and protection against un-

usual losses were not contained in the final bill. Also deleted were provisions which authorized technical assistance and consultative services to aid in the planning or development of an HMO.

* * * * *

Below is an interesting quote found in *Presidential Documents*:

Richard Nixon 1973, Vol. 9, #36, page 1063 and 1064.

THE PRESIDENT: One of our major problems, incidentally, I might say, is, as you were just talking about the Trade Bill, Wilbur Mills' incapacity. I don't know whether you know he has just had an operation, a disc operation, which, incidentally, if he had asked me, I would have told him never to have it. I haven't had one but I have never known one that was successful.

* * * * *

A public-private National Center for Health Education to oversee efforts to provide better health information to the public was recommended by President Nixon's Special Committee on Health Education.

In a report to the chief executive, the 17-member advisory group said future improvement in health care delivery and financing "will be virtually nullified unless there is, at the same time, an improvement in health education, which means not just supplying information about health to people, but motivating them to accept the information and put it to work in their daily lives".

Only a small fraction of the nation's health dollar is spent on public education, the report said, declaring there is a vital need for innovation and experimentation with new kinds of educational programs.

The National Center for Health Education would be a private, nonprofit organization authorized by Congress and financed from U. S. and private funds at an estimated yearly cost of about \$3 million. The Center would be managed by a 25-member board of directors appointed by the President and confirmed by the Senate. It would conduct research, coordinate state and local and national public education programs, and serve as an information clearing house.

Chairman of the advisory committee, which spent two years on the report, is R. Heath Larry, vice chairman of the U. S. Steel. There were two outright dissents on the report's findings and eight additional views which included expressions of reservations about the report.

In addition to the National Center, the President's Committee recommended:

- An HEW office serve as focal point for government-wide health education efforts.
- Consumers be more adequately informed about the health value of products and services.
- Hospitals provide patient education programs.
- Model state health education laws.
- Business, labor be encouraged to undertake comprehensive health education programs.
- Community health education centers be established.
- Serious consideration be given to preparing selected non-professional health educators as "paramedics, in effect, in the field health education."

Joseph Beirne, president of the communications workers (AFL-CIO), said the proposed center wouldn't work and that a firm commitment to the goals of health education is needed from four groups that would be the key to success: American Medical Association, American Hospital Association, American Public Health Association, and American Dental Association.

The other dissenter was Joy Cauffman, Ph.D., University of Southern California School of Medicine, who said the report discriminates against the coalition of national health organizations.

J. Henry Smith, president of the Equitable Life Assurance Society, said he was "uneasy" about the report's lack of clarification on how the Center would be set up and the "somewhat cursory" recommendations in other areas. Charles A. Stegfried, vice chairman of Metropolitan Life Insurance Company, said "numerous recommendations are made for extensive new activities without any clear indication of just what they might accomplish, what they would likely cost, or whether the hoped-for improvements would be commensurate with the cost."

* * * * *

President Nixon has won a showdown with Congress on health spending. The House failed to override his veto of the emergency medical services bill, making the veto stand and bolstering the administration's hopes of curbing federal spending this year.

The Senate voted before the August recess to overturn the veto.

In the interval, pro-Administration and anti-Administration forces and supporters of the bill worked hard to line up House votes for their

sides in what was regarded as an important test of the President's powers.

The bill authorized \$185 million over three years to aid state and local governments set up emergency medical services to cope with auto crashes and the like. In his veto message, President Nixon said the measure would establish "a large new federal program in an area which is traditionally a concern of state and local governments."

The chief executive also criticized a rider to the bill ordering the continued operation of eight public health service hospitals. He said "their inpatient facilities have now outlived their usefulness to the federal government."

Despite the Administration's opposition, the bill sailed through Congress by overwhelming votes.

The House vote on the veto was viewed as a key battle in the legislative war pitting congressional democrats against the Administration, a fight not only involving the issue of economy in government but the powers of Congress and the powers of the executive branch.

President Nixon had been successful in four previous vetoes this year.

* * * * *

Labor's leading proponent of a sweeping National Health Insurance bill, Leonard Woodcock of the United Autoworkers, engineered a tentative agreement with the Chrysler corporation requiring the company to pay the full workers' tab for any National Health Insurance plan that comes down the pike.

It was believed to be the first such provision in a major labor settlement and made clear labor leaders' desire to have management shoulder the full cost of NHI. The agreement made dollars and sense from the standpoint of the UAW, but took some of the gloss off the repeated Woodcock assertions before congressional committees that workers are willing to pay their fair share of any national health program.

Steven Schlossberg, UAW's general counsel, was quoted as saying that autoworkers have always supported NHI but "now they have even more incentive to press for its passage since, because of the new contract, there is no economic incentive for them to be against it."

The agreement states that in the event a National Health Insurance program is enacted Chrysler will be required to pay any direct premium or taxes which may be levied on workers.

* * * * *

October 29, 1973

To the Editor:

Enclosed find a copy of a report that I presented to the Public Health Committee of the Arkansas Legislature. As you know, they are considering legislation regulating Physicians' Attendants.

I thought you might want to publish this report in the Journal of the Arkansas Medical Society since I am sure there are many who will not agree with me and certainly we will appreciate their comments. This is something that the members of the Arkansas Medical Society should give serious thought and I hope they will let me know their views. I certainly hope that everyone will understand that I do not oppose the general concept of physicians' assistants, I simply believe that unless their training program is standardized we should proceed with caution.

Joe Verser, M.D., Secretary
Arkansas State Medical Board

Mr. Chairman —

Members of the Public Health Committee —

As Secretary of the Arkansas State Medical Board it is a pleasure to report to you that for 1973 there are 1,955 resident physicians registered by this board compared to 1,886 physicians in 1972. This represents an increase of 69 physicians over last year. In addition there are approximately 191 physicians practicing in this state on a Temporary Permit. A number of these physicians are waiting completion of their requirements for permanent license. Many of these, however, are interns and residents of the City of Memphis hospitals who cover the emergency rooms in a number of hospitals in Eastern Arkansas, thus relieving busy physicians of extra duties. If we can continue this yearly increase in physician population in this state and somehow induce new physicians to locate in the small towns the question of what to do with Physicians Assistants might well be solved.

I must admit after studying the problem of physician assistants for several years I am still not able to make specific recommendations relative to proposed legislation for these individuals. In my opinion the question of how much these P.A.'s should be allowed to do and just what they are capable of doing remains unsolved. This is an extremely heterogenous group of people. Their training is in no way standardized — varying from an excellent two-year program at Duke

Medical School down to a few months to a 5-week program at other training sites. There are over 100 registered training courses for P.A.'s in the United States. When one reads of some of the things they are supposedly qualified to do it becomes alarming — this includes thoracenteses proctoscopic examinations and other procedures of similar magnitude. Although these are classed as minor medical procedures major complications can develop even when they are performed by well trained physicians. Such complications will certainly develop when they are done by the P.A. The medical legal aspects of these circumstances are frightening indeed.

The development and utilization of this type of personnel is certainly appealing to many people. I would caution, however, that we should remember that the first and most fundamental act in rendering medical and surgical care is the assumption of the responsibility for the proper management of the patient and his illness. This the P.A. is not prepared to do. Thus it is important that he only assist — and not attempt to supplant — the physicians, lest lines of responsibility become blurred, and overall quality of care deteriorate. The proposal here is not that we oppose this concept altogether but rather that we proceed with extreme care and hope that some standardization in their training will be effected in the future. The A.M.A. and the National Board of Medical Examiners will give a certifying examination to Physicians Assistants in December 1973. I believe all P.A.'s should be required to take this examination. It will be interesting to see the results of these tests. It may be that all P.A.'s should be required to take the Healing Arts Board examination given by the Healing Arts Board and required for anyone who wishes to practice the Healing Arts in any form in this state.

It is well to note that Russia, one of the first nations to utilize the services of P.A.'s, is now giving high priority to the training of more physicians while the training of P.A.'s is being de-emphasized. Rather than enacting specific legislation at this time it might be well to continue to observe the P.A.'s that are now practicing in this state to determine their qualifications and how well they are going to be accepted by the general public. Some complaints are now being filed with the Medical Board relative to

these individuals; namely, physicians leaving the state on vacations and P.A.'s practicing medicine in their absence without supervision. I cannot see how a physician can adequately supervise a P.A. when he is in a remote area in Canada on a fishing trip. Some complaints that have been filed with the Board question the qualifications of these individuals and whether they should be permitted to practice independently of a physician, that is, without a physician actually being present.

In closing I am convinced that the best P.A. that the medical profession can develop will come from the nurses corps. Nurses and physicians have been co-partners in the delivery of health services for many, many years. The nurses have the tremendous advantage of standardized periods of training and they have a long history of working under the supervision of the physician and of recognizing and adhering to the limitations of their ability. Their full potential has yet to be developed and full utilization of their services could go a long way toward helping to provide adequate medical care in this state.

Physicians' Signatures Criticized

The Arkansas State Board of Pharmacy recently issued reprimands to several pharmacists who had filled improper prescriptions from physicians. Most were improper because of the signature. Too many doctors are using improper signatures, such as initials or other symbols, on prescriptions. Mr. Eugene R. Warren, attorney for the Arkansas Medical Society and the Arkansas State Medical Board, said that a doctor is required to write his name on prescriptions the same way it is on file with the Arkansas State Medical Board.

Mr. Warren stated that a proper prescription had to have the name and address of the patient, the name and strength of the drug, the amount of the drug, the directions for taking, the date of the prescription, the date it is filled, the signature of the pharmacist, the name and address of the physician, his proper signature and his Federal permit number.

Approved Program Offered For Insurance Savings

If you are not now getting dividends on your Workmen's Compensation Insurance, you may be interested in a program which has been approved by the Arkansas Medical Society.

Under this service, you have an opportunity to earn a saving or dividend each year when the cost of claims is low for participating physicians. In no case do you ever pay more than the lowest approved rate for your classification.

This program is for the employer who is interested in the safety of his employees and in earning a good safety record. Those insured receive a wide range of helpful, free services, including a specialized accident prevention program for their own operations. When followed, these proven safety principles can help reduce the frequency and severity of accidents and earn a reduction in the cost of Workmen's Compensation Insurance.

The program has been proved in use and is underwritten by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group, 92nd Street and State Line, Kansas City, Missouri 64114.



ANSWER—Electrocardiogram of the Month

PR interval = variable

Ventricular rate = 66 and slightly irregular

QRS = 0.08

QT = 0.38

Atrial rate—difficult to see and determine—thus the esophageal lead electrogram. There are many items of interest in this tracing, but the rhythm is the major point. P waves are virtually invisible—maybe present in V₁. At first glimpse this might be called atrial fibrillation with a slow and slightly variable ventricular response. The esophageal lead proves this incorrect. The P waves with the lead at about T-6 are very prominent, and might be confused with the QRS complexes. Here they are biphasic, initially negative and then sharply positive. The P wave follows the first and second QRS, occurs with the 3rd, 9th, 14th and 21st, and precedes the 4th, 5th etc. In other words, while the ventricle goes about its business with a His-bundle pacemaker, the atria are beating a little slower and then the same, and then faster than the ventricles. Some term this iso-rhythmic A-V dissociation. Others call it Associated A-V dissociation. The physiology which sustains this rhythm has not been clearly worked-out, but possibly involves a servo-mechanism using the Vagus and the carotid sinus. A colorful name for the rhythm is Accrache—meaning to ride on one's back or in tandem.

Other points in this ECG are the poor R wave progression in V leads suggesting old anterior infarction, but possibly secondary to chronic lung disease, and emphysematous chest configuration. The ST-T waves are quite abnormal, suggesting either digitalis effect or bi-ventricular ischemia.



PERSONAL AND NEWS ITEMS

Physician Assumes New Position

On November 1st, Dr. Robert B. Benafield assumed the position of Medical Director for Arkansas Blue Cross-Blue Shield. Dr. Benafield has been in private practice in Conway since 1962.

New Medical Building Planned For Fayetteville

Construction will begin in the spring of 1974 on the new Fayetteville Medical Center, which will be located on the southeast corner of the intersection of College Avenue and North Street in Fayetteville, adjacent to the Washington General Hospital. The facility, which will be the largest doctors' office building in Northwest Arkansas, is designed to provide a completely integrated medical service unit for doctors and their patients.

Physicians Elected

Dr. John R. Broadwater of Fort Smith was elected president and Dr. Fred T. Caldwell, Jr., of Little Rock, was elected vice president of the Arkansas Division of the American Cancer Society at its annual meeting November 1, 1973, in Little Rock. Dr. Broadwater succeeds Dr. A. T. Gillespie of Little Rock.

Physician Participates in Golf Match

The second annual United States-British Challenge Cup Golf Match was held October 21-22, 1973, in LaQuinta, California, with the American team winning for the second year. The first match was held in October 1972 in London, England. Dr. McDonald Poe, Jr., of Fort Smith, was a member of the American Physicians Golf Team. Teams consisted of sixteen members and four alternates from each country.

A Medal Tournament was held on October 20th and trophies were given to first and second place winners on both the American and British teams. Dr. Poe won first place on the American team and was awarded a silver trophy.

Physician Certified

Dr. E. Mitchell Singleton of Fayetteville has been certified by the American Board of Ophthalmology.

Dr. Fred Henker Elected

At the annual scientific meeting of Southern Medical Association Dr. Fred Henker of Little Rock was elected vice-chairman of the section on Neurology and Psychiatry.



THINGS TO COME



Hair Transplant Symposium and Workshop

A Hair Transplant Symposium and Workshop will be held February 8th and 9th, 1974, at the Stough Dermatology and Cutaneous Surgery Clinic, P.A., Doctors Park, Hot Springs, Arkansas. The conference, which is co-sponsored by the American Society for Dermatologic Surgery and the American Academy of Facial Plastic and Reconstructive Surgery, Inc., is designed to offer an opportunity for the exchange of ideas among various disciplines and to present the latest advances in techniques on hair transplantation. Faculty will include dermatologists, otolaryngologists and general plastic surgeons. Attendance will be limited. For further information contact D. B. Stough, III, M.D., Program Director, Doctors Park, Hot Springs, Arkansas 71901.

Clinical Anesthesiology for General Practitioners

A course on clinical anesthesiology for general practitioners will be held April 22-26, 1974, at the University of Oklahoma Medical Center in Oklahoma City. Enrollment in the course is limited to physicians who are not specialists in anesthesiology but whose practice includes the administration of anesthetics. One-teacher-to-one-student experiences in the operating room will occupy the morning sessions. The after-

noons will be involved with demonstrations and discussions on airway management; resuscitation and tracheal intubation; intravenous supplements to general anesthesia; management of problems in clinical anesthesia; practical nerve block and toxicity of local anesthetic agents; and

preoperative and postoperative management of anesthetic complications. For further information and application write Office of Continuing Medical Education for Physicians, University of Oklahoma Health Sciences Center, Post Office Box 26901, Oklahoma City, Oklahoma 73190.



NEW MEMBERS

Dr. Joe T. Backus

A new member of the Pulaski County Medical Society is Dr. Joe T. Backus, a native of Fayetteville, Arkansas. Dr. Backus received a B.A. degree from the University of Arkansas at Fayetteville in 1963. In 1969, he was graduated from the University of Arkansas School of Medicine in Little Rock. He stayed on at the Medical Center in Little Rock for his internship and a residency in Psychiatry, which he completed in June 1973.

Dr. Backus' office is located at 7624 Cantrell in Little Rock.

Dr. Hosea W. McAdoo, Jr.

Dr. Hosea W. McAdoo, Jr., has been accepted for membership in the Pulaski County Medical Society.

Dr. McAdoo is a native of Baltimore, Maryland. He attended the University of Oklahoma and the University of Arkansas before entering the University of Arkansas School of Medicine, from which he was graduated in 1966. His internship was completed at the Medical Center in Little Rock. From 1969 until 1971, Dr. McAdoo received residency training in Radiology at the Baptist Medical Center.

Dr. McAdoo is associated with Radiology Consultants at 612 Baptist Medical Arts Building in Little Rock.

Dr. George T. Schroeder

Dr. George T. Schroeder is a new member of the Pulaski County Medical Society.

A native of Pinckneyville, Illinois, Dr. Schroeder attended Vanderbilt University in Nashville, Tennessee, and was graduated from the University of Tennessee College of Medicine in Memphis in 1966. He interned at the City of Memphis Hospitals. Dr. Schroeder completed his residency training in Ophthalmology at the University of Arkansas Medical Center in July 1973.

Since August 1973, Dr. Schroeder has been associated with Dr. T. Dale Alford in the practice of Ophthalmology at 5700 West Markham in Little Rock.

Dr. E. Clinton Texter, Jr.

Dr. E. Clinton Texter, Jr., is a new member of the Pulaski County Medical Society.

Dr. Texter was born in Detroit, Michigan. In 1943, he received a B.A. degree from Michigan State University in East Lansing, Michigan, and was graduated from Wayne State University School of Medicine in Detroit, Michigan, in 1946. His internship was completed at Providence Hospital in Detroit. From 1948 until 1950, Dr. Texter was a Fellow in Medicine at Cornell University Medical College in New York, New York. During 1950-51, he was in residency training in Medicine at Goldwater Memorial Hospital in New York, and from 1951 until 1953, he was a Fellow in Gastroenterology at Duke University School of Medicine in Durham, North Carolina. Dr. Texter practiced in Chicago, Illinois, from 1953 until 1968, and from

NEW MEMBERS

1968 until 1972, he practiced at the Scott and White Clinic in Temple, Texas.

Board Certified by the American Board of Internal Medicine, Dr. Texter is serving as Associate Chief of Staff for Education at the Veterans Administration Hospital, 300 East Roosevelt Road in Little Rock.

The following intern and residents are new members of the Pulaski County Medical Society:

University of Arkansas Medical Center

John C. Canavosio — Resident, General Surgery.

Larry L. Doss — Intern.

James R. McNair — Resident, Ophthalmology.



PROCEEDINGS OF SOCIETIES

Tenth Councilor District Medical Society Meets

The Tenth Councilor District Medical Society held its annual meeting on November 6, 1973, in the Community Room of Wyatt's Cafeteria in Fort Smith. Dr. A. S. Koenig of Fort Smith and Dr. C. C. Long of Ozark are councilors for the Tenth District. Mr. Paul C. Schaefer,

Executive Vice President of the Arkansas Medical Society, spoke on "Professional Standards Review Organization" legislation and developments toward implementation of the law.

The Sebastian County Medical Society hosted the dinner meeting.



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THE JOURNAL OF THE Arkansas MEDICAL SOCIETY

Vol. 70 No. 8

FORT SMITH, ARKANSAS

98th ANNUAL SESSION

ARKANSAS MEDICAL SOCIETY

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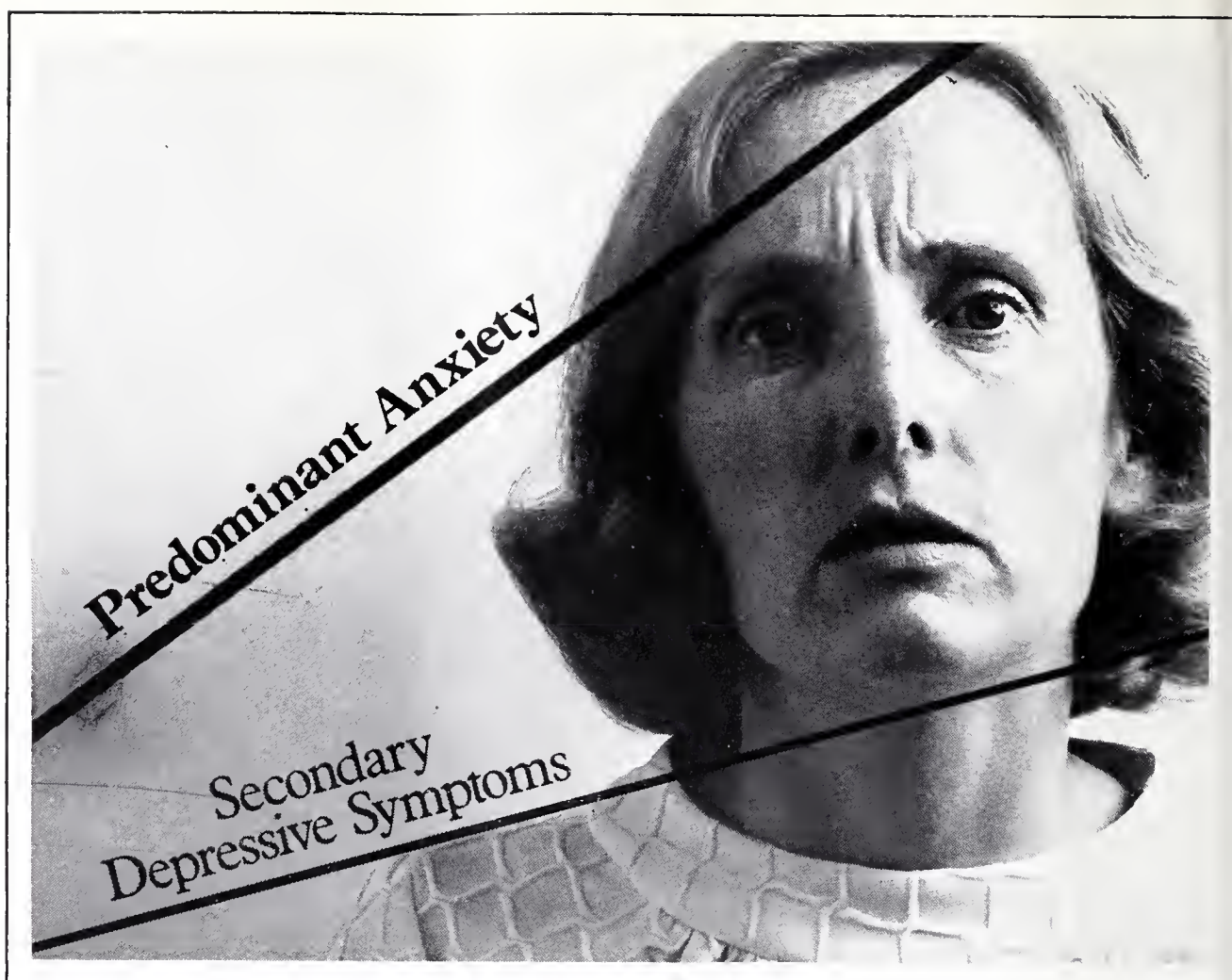
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medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 8. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

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vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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Epistaxis

C. C. Hanchey, M.D.* and Robert N. McGrew, M.D.**

Epistaxis often is a distressing condition to the patient and a time-consuming, frustrating experience for the doctor.

The purpose of this discussion is to present significant aspects of the problem and methods of management.

Anatomical Considerations

The blood supply to the nose and adjacent areas is plentiful from several vessels with mid-line anastomoses; this contributes to the difficulty of controlling epistaxis by ligating a single vessel.

However, a knowledge of the blood vessels and the areas they supply is essential to proper management of epistaxis. Anatomically, it may be said that the anterior and posterior ethmoidal arteries, branches of the ophthalmic, supply the septum and lateral nasal wall above the free middle turbinate except the region of the superior turbinate, the choana and corresponding septum which are supplied by a branch of the nasopalatine artery, a division of the sphenopalatine artery.

The sphenopalatine artery, a branch of the internal maxillary artery, supplies the nose below the middle turbinate.

Anastomoses occur at the midline between the ethmoidal arteries and sphenopalatine arteries of the opposite sides as well as with twigs from the labial and nasopharyngeal arteries.

Another source of bleeding may be from Woodruff's plexus of veins located on the posterior inferior lateral nasal wall beneath the inferior turbinate.¹

Studies² have been made showing that the anastomotic link between the two main arterial systems (ethmoid and sphenopalatine arteries) will accommodate when the pressure in one system is lowered, allowing "cross-over" bleeding.

Etiology

Although there are many causes for epistaxis, the first five listed below account for most of the bleeding seen:

1. Trauma — picking, drying, direct blow, foreign body.
2. Allergy — especially children.
3. Hypertension and associated alcoholism.
4. Infection of nose and paranasal sinuses.
5. Arteriosclerosis in elderly. (See below)
6. Blood dyscrasias — leukemia, thrombocytopenia, polycythemia vera, hemophilia.
7. Hereditary telangiectasis, liver disease, glomerulo-nephritis.
8. Malignancy of the nose, nasopharynx and paranasal sinuses with erosion of vessels.
9. Ruptured aneurysm of ophthalmic and internal maxillary arteries.

Shaheen² discounts atherosclerosis and hypertension and explains bleeding in the elderly as an aging process of the vessels with loss of muscle in the tunica media, replaced by collagen, which results in inability of the vessel to contract.

Diagnosis

History is important to localize the source of bleeding. Bilateral epistaxis is rare and blood in both nasal cavities usually means posterior bleeding with blood coming around the posterior margin of the septum into the opposite nasal cavity. Anterior bleeders usually present with blood coming from the anterior nares first. Posterior bleeders usually present with blood coming from the throat.

If the patient's condition permits (not hypovolemic or in shock) examination to locate the source is best accomplished with the patient sitting up, a good light source (head mirror or head lamp), adequate suction and appropriate

*3609 Ridge Road, North Little Rock, Arkansas 72116.
**Medical Towers Building, Little Rock, Arkansas 72205.

instruments. The continuous assistance of a nurse or aide is advisable.

Treatment

When the patient presents with a severe epistaxis or history of bleeding intermittently for several days, a rapid assessment of his general condition must be made before treatment procedures that may cause shock are instituted.

Methods of management may be one of the following:

1. Medical management.
2. Anterior and posterior nasal packing; cauterization.
3. Arterial ligation.
4. Intranasal freezing.
5. Skin graft intra-nasally.

1. Medical management lends itself to the less severe and less persistent bleeding. It is basically a method of controlled hypo-tension and assumes that these patients are hypertensive, at least temporarily.

The patient is hospitalized and complete examination done. Drug therapy³ may be as follows:

- a. Demerol 50 mg IV or 100 mg IM stat and q 3 hr. prn.
- b. Aqua Mephyton 10-50 mg daily for three days. Vitamin C 100-500 mg IM daily for three days.
- c. The above medication is followed on the fourth day by Nembutol 100 mg every six hours for three days.
- d. Head of bed is elevated and ice bags applied to back of neck and external nose.

2. Nasal packing. When the bleeding can be located (usually anteriorly) the nasal mucosa is anesthetized and cauterization with an electric cautery or by chemical cautery may control the bleeding.

When the bleeding source is not seen (usually posteriorly) anterior and posterior nasal packs may be used. To relieve much of the discomfort associated with this procedure, a sphenopalatine block as suggested by Padrnos⁴ is done. Many times it controls or slows the bleeding temporarily. The procedure consists of carefully injecting 5 cc of 1% Zyllocaine with 1:100,000 Epine-

phrine into the pterygopalatine canal via the greater palatine foramen. This along with topical anesthetic sprayed into the nose anteriorly will materially reduce the discomfort. A post-nasal gauze pack impregnated with antibiotic ointment is placed on the bleeding side. Anterior gauze packs are placed in both sides of the nose. To obtain good anterior packing it is essential that the gauze be placed several layers at a time on the floor of the nose and then lifted to the roof and under the dorsum of the nose.

The packing is usually left in place for five days and the patient given antibiotic to avoid complicating sinusitis and otitis.

It has been estimated⁵ that 20% of nose bleeds are not controlled by packing. Another objection to packs is that some patients, particularly the elderly, develop a mild psychosis, probably the result of reduced oxygenation.

3. In recent years, increasing interest has been evident in early ligation of specific arteries to control epistaxis. These procedures control bleeding effectively, are well accepted by the patient and probably shorten the treatment period for many.

About 10% of patients with severe epistaxis have bleeding from the area supplied by the anterior and posterior ethmoid arteries. These vessels may be ligated or clamped in the orbit as they enter the medial wall.

For bleeding in areas supplied by the sphenopalatine artery and the posterior portion of the nose, transantral ligation of the terminal branches of the internal maxillary artery have proven effective. Pearson et al.⁶ published a comprehensive review of the arterial anatomy of this region and demonstrated the reason for placing clips on several terminal branches of the internal maxillary artery.

Ligation of the external carotid artery on the affected side may be useful in the control of some patients with epistaxis, but has the disadvantage of affecting a large vascular bed which allows development of collateral vessels and recurrent bleeding. It is preferable to ligate vessels nearer the source of bleeding.

4. Intranasal freezing has been reported as an effective treatment by Bluestone⁷ and others. Equipment required for this procedure is Steven's

nasal balloon and a hypothermia machine. The balloon is inserted into the bleeding nasal cavity, attached to the machine which circulates 95% ethyl alcohol at temperatures down to 20 degrees centigrade for 60 minutes. After the freezing, which usually controls bleeding in 5 to 10 minutes, the temperature is brought up to 5 or 10 degrees from the balloon detached from the machine, but left in the nose for 24 hours. This results in acute inflammation, but has no side effect on the nasal cartilage. Regeneration of the mucosa and mucous glands occurs in approximately two weeks.

5. For those patients whose bleeding occurs due to hereditary hemorrhagic telangiectasis, removal of the involved nasal mucosa and replacement with split skin grafts as described by Saunders⁸ should be done. Telangiectatic vessels under the protective squamous epithelium gen-

erally do not bleed. There may be crusts that require removal for two or three weeks following the procedure.

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Tear Duct Obstruction in the Infant—A Practical Approach to Diagnosis and Therapy

J. E. McDonald, II, M.D.*

Obstruction of the nasolacrimal duct system in the infant is a common congenital malady occurring in 6% of infants.¹ The medical and surgical management is almost invariably successful when properly executed. It is the purpose of this paper to present an orderly approach to its diagnosis and therapy so that the pitfalls, complications, and accompanying parental anxiety can be easily avoided.

ANATOMY

The crux of both the diagnosis and therapy lies in the anatomy of the lacrimal duct drainage system. Figure 1 shows the basic anatomy of the lacrimal collecting and drainage system divided into three parts: 1) the puncta and canaliculi: The puncta are located just inside the upper and lower lid, 6.5 mm from the medial canthus. The tears are collected through the puncta and then drained by the canaliculi into

the tear sac. 2) the tear sac: The lacrimal sac lies in the lacrimal fossa formed by the lacrimal bone and frontal process of the maxilla and serves as an intermediate reservoir for the tears on the way to the nose. 3) nasolacrimal duct and orifice: The nasolacrimal duct empties through its ostium into the nose just under the inferior concha.

Disappearance of the epithelial membrane across the ostium takes place during the last week of intrauterine life or the first week of infancy. It is the persistence of this membrane that accounts for most of the obstructions.

DIAGNOSIS

A history of awakening with matted eyes, tears running down the side of the face when the baby cries or is exposed to wind, and a raised, red, fluctuant area over the tear sac are the diagnostic features of nasolacrimal obstruction. One or all of these features may be present. Since the newborn does not begin to make sufficient tears until the second or third week of life, the symptoms are usually not present until the third or fourth week of life.³ The physician confirms the diagnosis by retro-expression of epithelial tear debris and pus (inflammation) with pressure on the skin area overlying the tear sac. This back-flow occurs due to the lack of patency below the sac.

TREATMENT

Medical therapy consists of antibiotic ophthalmic drops to eliminate and suppress infection in the stagnant drainage system. Ten percent Sulfacetamide given four times a day is usually adequate for control. Just as in young obstructed middle ears, the two most common offenders are *Pneumococcus* and *Hemophilus influenzae*. Once the infection is under control with antibiotic drops, definitive therapy may be started.

The mother performs "massage" four times a day, by placing her fifth finger over the tear sac area at a 45 degree angle so as to prevent retro-

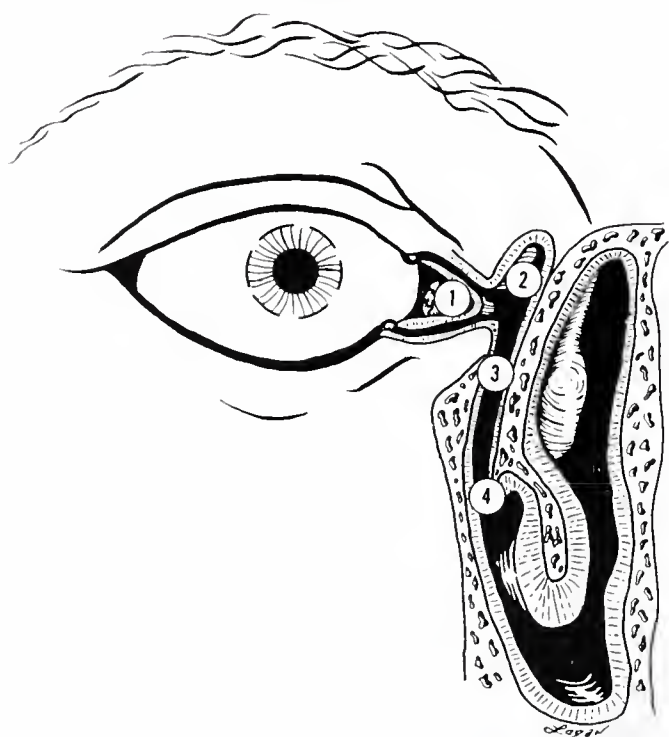


Fig. 1

Normal anatomy of the tear collecting and drainage system showing 1) The puncta and canalicula, 2) The tear sac which serves as a reservoir, 3) The nasolacrimal duct and 4) The ostium, most common point of obstruction.

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grade flow back through the puncta (Fig. 2). The finger is then rolled downward so the tear sac contents create a positive pressure against the usually thin epithelial membrane that is occluding the distal opening into the nose. This is repeated four times daily for two weeks. Eighty percent will be cured by this method. The greatest number of medical failures is due to the timidity of the mother's massage. For this reason, the physician should demonstrate the technique on the mother along with a simplified explanation of the anatomy. The physician should emphasize verbally, as well as physically, the quantity of force required and that the child will most certainly object. The mother should understand that "massage" is the most important part of the regimen.

If, after two weeks of massage, the patient's problem persists, the infant should be referred to an ophthalmologist for evaluation and possible probing. Because of the delicate and winding passageway, the probing should be performed by someone intimately aware of the anatomy. If the child is young enough, many times this can be done without general anesthesia. The avoidance of general anesthesia coupled with the possibility of scarring from recurrent infection is the reason early referrals of medical therapeutic failures is mandatory. Following the first probing, most remain patent. Some require repeated probings and a few require other surgical intervention not within the scope of this paper. Fre-

quently, the ophthalmologist is consulted too late for any but drastic measures. Probing is almost always successful in infants under 1 year of age.²

SUMMARY

Tear duct obstruction occurs in 6% of all newborns. Its most common presenting picture is excessive tearing, tear sac infection and chronic conjunctivitis. Over 80% of these respond to medical therapy and massage by the parents. Most of the remaining respond to simple probing of the nasalacral system. An outline of diagnosis and medical therapy, including massage is presented and particular emphasis is placed on the importance of demonstration and follow through of massage. A plea is made for early referral of therapeutic failures to avoid the complications of chronic inflammation and the risk of general anesthesia.

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Acknowledgement: I would like to acknowledge the excellent artistic assistance of Mr. James Logan.



Fig. 2

The diagnosis is confirmed by the retro-expression of tears and epithelial debris by applying pressure over the tear sac.

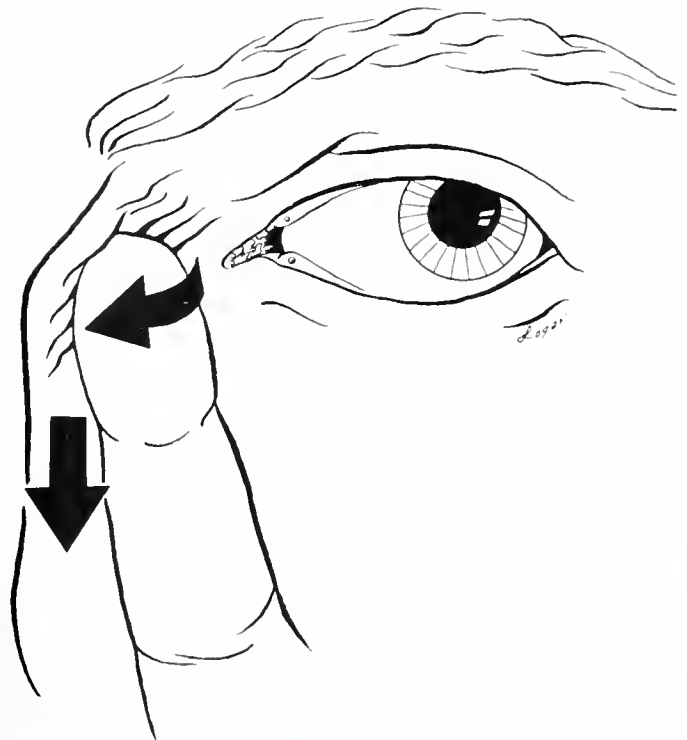


Fig. 3

Most obstructions will open within two weeks with daily "massage". The little finger of the mother is placed over the tear sac and the contents are used to apply pressure against the occluded ostium by rolling the finger toward the nare of the affected side.

Treatment of Depression

Joe T. Backus, M.D.* and Robert F. Shannon, M.D.**

In the preceding two articles we have described, differentiated and speculated about the causes and origins of depressive illness. In this article we will cover most of the general aspects and concentrate on some of the specifics of treatment.

General Aspects

Depression involves changes in the individual's way of relating to his environment, in his physiology and neurochemistry and in his psychic functioning. Treatment would therefore involve the restoration of a healthy environment (milieu), normal physiology (chemotherapy) and a functional psychic apparatus (psychotherapy).

A. Milieu or environmental controls — in general and in all phases of the illness the environment is set up to expect and reinforce healthy routine functioning. The family and close friends of the patient are important in this part of the treatment. The therapeutic attitude, which is usually nonverbal is "adults get depressed but are treated as adults and not as children." Time is structured and secondary gains (gains for being "sick") are minimized. Healthy behavior such as independence, assertiveness and verbal expression of feelings are encouraged and praised. Unhealthy behaviors such as retreating, withdrawing or acting helpless are discouraged or ignored.

B. Somatic therapies — (1) Chemotherapy: Various antidepressant agents are now on the market. The two primary categories are the monoamine oxidase inhibitors and the tricyclics. The MAO's are still widely used in Europe and Canada with good results. In this country their use has fallen off because of the risk of side effects which require very close management and conscientious attendance to detail on the part of both the physician and patient.

The tricyclics have been found to work equally well whether in divided dosage or once daily dosage, usually bedtime. Side effects are usual and forewarning is useful. Frequent side effects are: 1.) dry mouth, 2.) dizziness on rapid posture

changes, 3.) blurred vision, 4.) drowsiness which usually clears up in 4-6 days. The therapeutic effects of the drug are usually slow in onset and may take 10 to 21 days for the lifting of the depressed mood. Communication concerning the slow onset may be helpful in setting reasonable expectations from the medication with the patient.

Electroconvulsive therapy is used in our hospital when other forms of treatment have failed. We are currently using unilateral shock which has the advantage of creating minimal post shock confusion and can be administered on a daily basis thus shortening hospitalization.

C. Psychotherapy — The primary aim is to give moderate support while expecting improvement manifested by goal directed activity. Independent, realistic and assertive behavior is encouraged. Obsession, self-critical ruminating is discouraged. The focus of therapy is on the here and now. Methods of stopping and reversing the withdrawal process are sought. Withdrawal is usually from appropriate physical activities (such as work, hobbies, friends) as well as from appropriate expression of feelings (such as anger and hostility). Ways of reinstituting these behaviors are explored.

As the patient gets better some of the precipitating causes (such as how feelings such as anger and guilt, poorly handled, can lead to depression) may be studied with the goal of preventing recurrence. Previous successful management of feelings are explored and ways of handling feelings successfully in situations similar to those leading to the depression are found.

In assessing the use of members of the family or friends, two important points are: 1. The patient's wishes as regards to his family or friends. 2. The maintenance of a constructive working relationship with the family or friends.

Specifics of Treatment

Although there are many classifications of depression, for brevity we will discuss two clinical types according to severity: the acute severe depression and the moderate depression.

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Acute Severe Depression

A. *Presenting picture:* The patient usually appears physically debilitated, distraught and he shows a sad affect. His thought processes are "painful" and reflect pessimism, apathy and self depreciation. Physically and physiologically he is fatigued, moves slowly, may show decreased vital signs and may report numerous physical complaints, appetite loss and insomnia. He may be extremely agitated verging on loss of control. Suicide may be seen by the patient as a source of relief or solution to the "problem".

B. *Treatment* — Hospitalization is usually indicated if the depressed patient is agitated and quite suicidal. Patients who are not actually suicidal may be treated on an outpatient basis but require close management.

1. *Ward Routine or Milieu* — Patient is observed very closely to prevent and protect him from self-destructive acts. Every effort is made to encourage him to re-establish routine functioning. His time on the ward is so structured as to reward "healthy" behavior (assertiveness, responsibility, independence) and discourage "sick" behavior (i.e. regressive, withdrawal, helplessness and irresponsibility). He is discouraged from spending too much time alone or staying in bed and is expected to keep usual meal and bedtime routine.

2. *Chemotherapy.* Tricyclics are currently the treatment of choice. Therapeutic effect should be accomplished as rapidly as possible. Since onset of action is slow, medication should be started rapidly and in sufficient dosage. Sufficient dosage ranges are (by trade name); Tofranil, Norpramine, Pertofrane and Elavil — 100 to 200 mg daily either in divided or once daily bedtime dosage; Aventyl 50-100 mg daily; Vivactyl 15-40 mgm divided dosage; Sinequan 100 mgm to 200 mgm per day. Each patient's dosage should be individualized (further prescribing information can be obtained from the PDR or current literature).

The first few days the patient will probably complain of bothersome side effects such as dry mouth, blurred vision, drowsiness and possibly postural hypotension. These should be explained to the patient as well as the slow onset but should not be allowed to interfere with the previously

described milieu routine. For example, if a patient complains of drowsiness the physician should say, "That's a side effect of your medicine and should wear off in a few days. Go ahead with the ward activities". Occasionally, a side effect is severe and/or persists and may require lowering the dosage or in some instances stopping the drug.

While each patient's response to medicine is different, our observation is that patients on tricyclics seem to show a few days of primarily side effects followed by normalization of sleep habits within 2-5 days, a return of appetite within 5-10 days and betterment of mood in 11-20 days. By the second week, nearly all the side effects have worn off except the dry mouth. Dry mouth persist throughout treatment and the use of gum or mints may help.

Once a sustained improvement is shown, the patient should be discharged from the hospital and treatment continued on an outpatient basis. However, a word of warning is important here. Occasionally a too percipitous and unexplained improvement in mood may indicate a patient's decision to commit suicide. The physician should, if he suspects this, confront the patient by directly asking him, "Have you decided to kill yourself?" In most cases he will tell you, if, however, the physician is still in doubt he should continue hospitalization.

Upon discharge, the patient should be told he is only over the acute phase and that he should be seen frequently and can expect to continue on medication about 3-6 months.

If after 4 weeks, despite dosage adjustment, no minimal therapeutic effect is seen, it is our opinion that ECT should be used.*

3. *ECT:* Some depressions are amenable only to ECT. These include those patients unresponsive to an adequate trial on tricyclics, those where treatment on medication is impractical, those who have had previous severe depression which responded well to ECT or poorly to antidepressants.

*In the event that there is a significant degree of thought disorder (delusions, hallucinations) which does not clear up after a trial on tricyclics alone, Phenothiazes are indicated and should be given in conjunction with Tricyclics. The most common of these are Thorazine, Mellaril, Trilafon and Stelazine. These may also be used to treat excessive anxiety.

For details of how to administer ECT see: "Unilateral Electroconvulsive Therapy", *Current Psych. Ther.* 9:155-160, 1969.

4. *Psychotherapy*: Early sessions are used to collect information. In the acute severe depressive, exploratory introspective interviews should be actively avoided. While the patient's thinking is primarily painful, pessimistic and self-depreciatory brief interviews are preferred since such patients quickly get worse if encouraged or allowed to do much introspection. Psychotherapy is supportive, matter of fact and deals with the here and now. The physician's attitude during the first few days of hospitalization should be one of realistic optimism and concern and should communicate to the patient, "I know how miserable and uncomfortable you feel. Until your way of thinking gets healthy again, we will encourage you to do more and think less. As you start feeling better we can look at how you got depressed, how you can stop being depressed and how you can avoid feeling depressed in the future."

Once the patient is over the acute stages of depression and is ready for discharge (eating well, sleeping well and is interested in his surroundings) the psychotherapeutic focus shifts to raising self-esteem, controlling anger better and finding ways to feel less guilty. These are discussed in the next section under psychotherapy.

Moderate Depression

A. *Presenting Picture*: The patient usually appears run down, complaining of loss of sleep and loss of appetite.

His thought processes are usually reflective of obsessive concerns which are painful, self-depreciatory and he may have considered suicide and then become frightened by this idea. If the patient is not actively considering suicide as a solution to his state of mind he can usually be treated on an outpatient basis.

B. *Treatment*:

1. *Milieu*: It is usually very important to deal with patient's disturbed routines. In order to do this, efforts are made to re-establish what the patient's sleep routine was when he was normally functioning; re-establish his eating routine in the same way; and set as one of the goals a return to the work patterns, social life and other activities he formerly engaged in.

Tell the patient to call you if he gets to feeling worse or suicidal. It may be useful to prescribe a limited amount of sleep medication to help the patient re-establish his sleep pattern, but never enough to be used for suicide.

The family can be very useful in helping re-establish normal functioning. Again here the emphasis should be that the patient is an uncomfortable adult and not a child. He should be treated with consideration and helped back to normal functioning but not infantilized. Make very clear the importance of independent functioning and eventually improving direct, clear communication among the family members.

2. *Chemotherapy*: A clear explanation of the delayed onset of the anti-depressant medications should be given. The effects to be expected are some improvement in sleep patterns in 2-5 days and return to normal appetite in 5-10 days with the mood lifting effect of the drug taking 10-20 days should be explained. The principal side effects of drowsiness, dry mouth, blurred vision and postural hypotension should be explained as well as giving suggestions about coping with these effects. The dosage given should be in the ranges we previously described. Medication can be given in either divided or one time daily at bedtime dosage.

Anti-depressants are used in suicide attempts and their quantity should be closely regulated. As with sleep medication one should use care to not give enough medicine to be a fatal dose if taken all at once.

As the patient improves he may ask to discontinue the medication; however, we feel the medication should be continued for 3-6 months after the initial acute episode. We also feel that explaining this to the patient initially communicates your feeling that the patient will get better.

3. *Psychotherapy*: In a previous article on psychodynamics we pointed out that depressives tend to be overly rigid, self-critical, demanding, dependent and hostile. They usually see some of these traits as "bad" things for which they should feel guilty. When the combination of dependency, hostility and guilt weight them down, they become depressed. The goal of psychotherapy is to take these traits separately and establish a better way of coping.

The depressive looks at dependency in an unrealistic way. He feels that if he were a "good" person he would have no dependency needs. He further feels that when he does have dependency needs no one will meet them.

Example: A depressive is driving down a country road and has a flat tire. He looks in his trunk for a jack. Not finding one he spots a farm house $\frac{1}{4}$ mile away with a truck in the front yard and says to himself, "I'll go borrow his jack." As he approaches the house he is feeling bad (1) for failing to have a jack, (2) for having to depend on someone else for help. As he gets nearer the farm house he begins to expect rejection and to get angry over what is his *expectation* of rejection. He becomes more and more angry at unmet dependency needs, (projects the anger he feels toward himself for needing the jack), so that by the time he knocks on the door, the farmer opens the door and the depressive yells, "Keep your goddamn jack". This will usually guarantee that he doesn't get the jack and he walks back reconvinced that you can't depend on people.

Psychotherapy would aim in the above example to, stepwise, help the patient (1) realize no one is perfect and that his past efforts at being perfect were not only futile and self defeating but arrogant and silly as well; (2) that everyone is dependent on somebody sometime and that it is o.k. to be dependent and even at times healthy to be appropriately dependent; (3) that rejection is not universal and to the extent that the rejection is created by the patient, he can change the rejection by changing his behavior; and (4) that the combination of expecting, projecting and hostilely communicating can bring about rejection. The rejection is the result of the hostile communication and not his needs or of him.

Psychotherapy is done by pointing out the above to the patient and then having him apply

it to his everyday life. He must learn to recognize his feelings, accept them, then make the best choices as to how to express them. Progress is slow and the patient may make the same mistakes repeatedly.

The therapist's role is to keep pointing these out while helping the patient find more healthy ways to cope.

Generally, the patient is taught to be appropriately assertive and responsible for his own feelings and actions and to become increasingly in charge of his own life.

Additionally, the patient is encouraged to develop new interests and *activities* to the extent that he wants.

To foster a sense of independence, contact with the therapist should be made less frequent so the patient knows he is on his own as soon as he can handle it.

Summary

In this article we have discussed the clinical picture of acute, severe and moderate depression and the therapeutic tools and techniques necessary for successful treatment.

Our contention is that these should be in the armamentarium of every primary physician and that a majority of depressions can and should be treated by the primary physician.

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Office Orthopaedics

Lateral Elbow Strain—or "Tennis Elbow"

R. Barry Sorrells, M.D.*

Orthopedic terminology, especially the nomenclature of Sports Medicine, is becoming confusing and incomprehensible with terms such as "Swimmer's Shoulder", "Little League Elbow", "Surfer's Nodule", and "Tennis Elbow". These catchy "catch-all's" are non-descriptive and diagnostically inadequate.

Tennis Elbow has generally been regarded as a lateral epicondylitis. At least one recent article, however, has also described it as a medial epicondylitis; and others have even decided that it more commonly affects the radiocapitellar joint than the epicondyle. Most studies have confirmed that it occurs much more commonly in non-athletes than in tennis players.¹ In fact, tennis players make up less than three percent of the patients with "Tennis Elbow". Therefore, the author makes a plea for a more descriptive term — "Lateral Elbow Strain". Webster defines "strain" as "to injure by over-exertion".²

Lateral elbow strain is the painful result of injury from over-exertion of the structures of the lateral elbow: the epicondyle and its periosteum, the tendinous origin of the wrist and finger extensors, the capsule and synovium of the radiocapitellar joint, the annular ligament, and the surrounding soft tissues. Such injury is likely a result of any activity that places stress on these structures — be it tennis, golf, skiing, swimming, gardening, or even washing dishes. It is a common problem in office orthopedics, equally affects both sexes, more commonly is the right

elbow, and is said to be four times as common in the fourth decade of life as in any other decade.¹

ANATOMY

The common extensor muscle origin is from the lateral humeral epicondyle. This aponeurosis passes over the lateral radiocapitellar joint and joins the muscles in the forearm which function as extensors of the wrists and fingers. Consequently, any activity that places excessive demand on the wrist and finger extensors also places stress on the origin of these muscles at the elbow. A tendinitis or capsulitis may result.

EXAMINATION

The clinical examination of the patient with pain in the lateral aspect of the elbow may be quite revealing. Palpation over the epicondyle may demonstrate acute tenderness. Rotation of the forearm with the examining finger over the radiocapitellar joint may reveal point tenderness in the capsule, synovium, and joint, rather than the classically described epicondyle. The annular ligament at the neck of the proximal radius may be painful to pressure. Thus, the examiner can easily delineate the exact region of lateral elbow strain. The classical and diagnostic maneuver for the diagnosis of lateral elbow strain is to gradually palmar flex the patient's actively dorsiflexed wrist — that is, dorsiflexion against resistance. This produces lateral elbow pain, possibly quite acute! This simple maneuver is significant in that this is the only direct functional connection between the wrist and the lateral elbow. Therefore, it is of real diagnostic import.

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X-rays in the AP and Lateral projection should be obtained, but usually these are of value in a primarily negative sense. Rarely does one observe bony pathology — perhaps minimal calcification or exostosis laterally in the chronic recurrent case may be noted. However, more often than not, the x-ray study is interpreted as normal.

TREATMENT

Treatment is initially directed at alleviating the presumptive causal factors. Placing the elbow at rest with minimal activity, a sling, or even a posterior splint is recommended. This may be required for several days or even weeks before the patient obtains relief of pain. Analgesics frequently are required, and occasionally, anti-inflammatory agents are of value. The constrictive "Tennis Elbow Band", an elastic band worn below the elbow, has recently become popular. Theoretically, the band serves to functionally "transfer" the muscle origin distal to the strained elbow. Its benefit, however, is not yet proved, and can certainly be of no more than temporary value. Indeed, these initial measures may prove to be inadequate therapy and a more aggressive approach may be necessary.

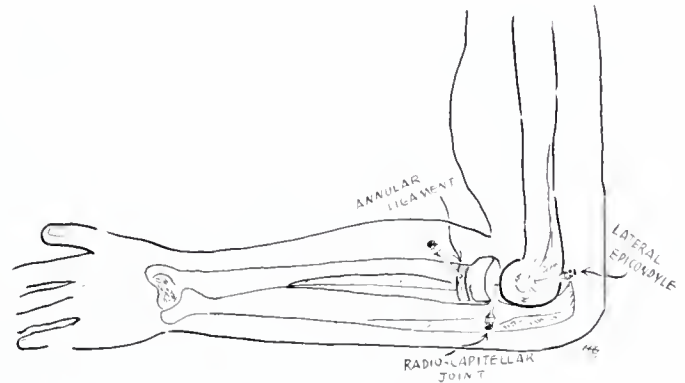
Low voltage x-ray therapy has been used in a number of cases. Theoretically, this has an anti-inflammatory effect, and although frequently beneficial in the treatment of shoulder bursitis and supraspinatus tendinitis, the results in lateral elbow strain have been erratic and generally discouraging.

Cortisone injection, along with alleviating the causal factors, is usually beneficial and frequently permanently curative in the treatment of the symptoms of lateral elbow strain. This has become a mainstay of orthopedic management in the acute and chronic case.

The author recommends shaving hair from the lateral elbow area, a thorough preparation with an iodophor compound, sterile draping of the part, and the use of sterile gloves, syringes, and needles. Absolute asepsis is mandatory! A mixture of local anesthetic and an intra-articular steroid preparation in a solution of about 3.0 cc. is used. The steroid drug manufacturer's recommendations are followed for the dosage recommended for injection of a "medium joint". This may be 10-20 mg. of methylprednisolone acetate, 3-6 mg. of betamethasone sodium phos-

phate, or 25-50 mg. of hydrocortisone acetate. There are many products available, each with various claims of superiority, and the physician should familiarize himself with the individual compound, its efficacy, and potential complications. Bacterial, viral, or fungus infection is a primary contraindication to the use of steroids. Although very little of the compound is systemically absorbed following intra-articular injection, potential systemic effects must be borne in mind.

The area of maximum tenderness is initially infiltrated with the mixture through a 25 gauge needle. Thereafter, a small amount is also injected directly into the joint from the lateral aspect. The capsula and synovium, the annular ligament, and the epicondyle are all injected. (See Figure 1.)



Within a few minutes the patient may experience marked relief of symptoms. Obviously, the symptomatic response is due to the local anesthetic, but since the steroid is well mixed with the anesthetic, this indicates the medication has been delivered to the proper site.

The patient should be advised of the possibility of post-injection "flare" as the anesthetic wears off. This temporary increase in pain will usually subside within twelve hours. Symptomatic relief should again return.

Most patients will obtain relief from pain with rest and/or injection. Paretta and James reported that 40 percent of their patients treated in this manner obtained complete and permanent relief of symptoms, 31.6 percent obtained complete relief for 1-12 months only, and 20 percent obtained less, but still significant improvement. Only 7.3 percent failed to improve.³

It must be mentioned, however, that although a remarkable improvement may be noted with

steroid injection, this procedure must not be indiscriminately and repeatedly carried out in the same elbow joint. It has been well shown that too-frequent injection of intra-articular steroid can produce a Charcot-like joint, with collagen necrosis at the site of infiltration.⁴ Therefore, repeated injections (in excess of a total of four injections over a 24-month period) is not generally recommended by the author.

An occasional patient may fail to respond to rest, analgesics, anti-inflammatory agents, and injection. This patient fits into the 7.3 percent failure category of Paretta and James³ and into the 4.5 percent failure category of Boyd and McLeod.⁵ This patient may become a surgical candidate.

Many articles have been written describing surgical treatment for the chronically strained elbow which is unresponsive to conservative management. Numerous procedures have been described, and some of these are: neurectomy of the articular branches of the radial nerve,⁶ synovectomy of the radiocapitellar joint,⁷⁻⁸ repair or release of the extensor origin at the epicondyle,^{1,9,10} and lengthening of the extensor carpi radialis brevis.^{11,12} A recent article has described a procedure which combines excision of the proximal portion of the annular ligament, release of the origin of the extensor muscles, excision of a bursa if present, and excision of the synovial fringe.⁵ The authors of this series reported an excellent or good result in 22 of 25 patients operated and followed from six months to sixteen years after surgery. They reported no poor results.

SUMMARY

The majority of patients with lateral elbow strain, that is, injury to the epicondyle, radiocapitellar joint, annular ligament, or other soft

tissues at the lateral elbow joint will respond to conservative measures of rest, analgesics, anti-inflammatory agents, and cortisone injection. These measures are best prescribed and carried out in the physician's office, and fall within the realm of “Office Orthopedics”. An occasional patient (4-8 percent of the total) will not respond to these measures, and will require a more aggressive approach. Most of these patients will profit from an appropriately directed and executed surgical procedure.

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ELECTROCARDIOGRAM

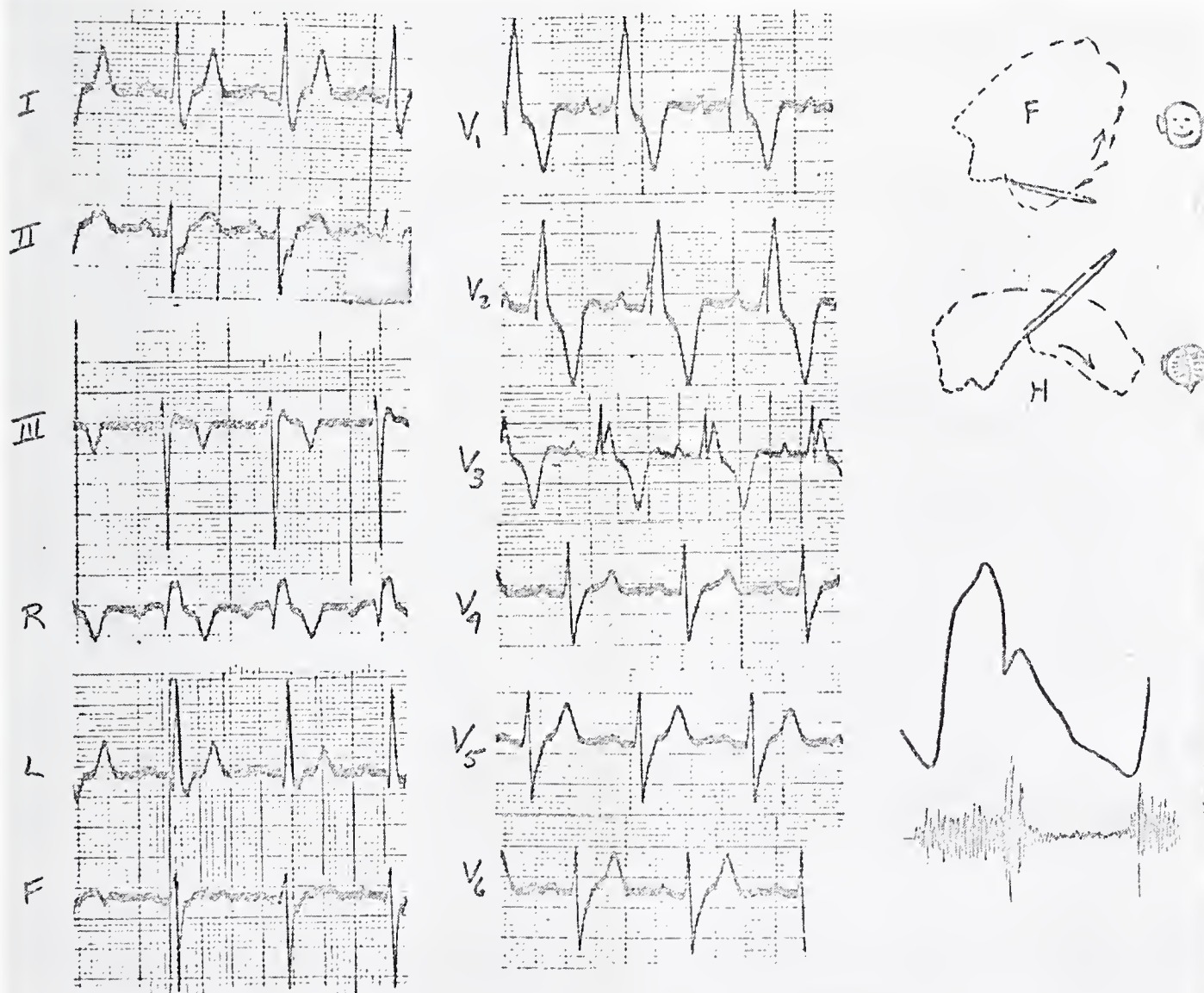


OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 275)

35-year-old white female with heart lesion since birth; BP = 140/90



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205



PUBLIC HEALTH AT A GLANCE

"A Salute"

Carol A. Hopkins*

Catherine Dees Hidy (Mrs. Virgil Franklin Hidy) never planned to be a "career woman". Nevertheless, in June of 1939 Catherine Hidy became secretary to the Little Rock, Arkansas, City Health Officer, a position she held until September 1944.

From September of 1944 to October of 1945, "Hidy" (as most people call her) attended graduate school at Yale University. She was the first female non-medical worker from Arkansas to receive a Master's in Public Health. She also has a B.A. from Galloway Woman's College (1926) and Hendrix College (1937).

Upon Hidy's return to Little Rock, she was named to the position of Health Educator for the Little Rock City Health Department. She held this position until December of 1958 when she became Director of Public Health Education for the City Health Department. She remained as such until her retirement in December of 1973.

During the 34 years that Catherine Hidy has devoted to public health she has become a much respected authority and public servant.

Catherine Hidy typifies the ideal of "team spirit" although her own accomplishments are many and varied. To maintain the spirit of the public health team, Hidy has developed her own philosophy — "one of my ideas on health education is the ability and necessity of working with everyone. There is a continuous need to instill an interest in public health and public health employees should not narrow themselves to one role. Not all of the work in public health is done between the hours of 8 a.m. and 5 p.m. and this must be realized."

Hidy says she is not a "joiner" but strongly feels that in order to get your point across you must "pay your dues". Although she's not a joiner, her organizations, board and committee memberships numbered approximately 30.

Mrs. Hidy is a modest person, particularly when it comes to her own accomplishments. She says, "Many do much more than I do, but they do not receive the recognition that they should."

Some of Catherine Hidy's treasured awards, recognitions and accomplishments include the following:

In 1963, she won the first individual award given for work done in Arkansas in the Medical Self-Help Training Program from the U. S. Public Health Service, Department of Health, Education, and Welfare.

She organized the first Clean-Up Campaign for Little Rock. It was sponsored by the Federation of Women's Clubs and was a forerunner to the City Beautiful Commission, of which she is a charter member.

In 1954, dental authorities requested a program on dental health in the public schools. Hidy came to the rescue with a program using Marionettes and a "Pop-Up" Story Book, which won her national recognition. For this she received an award from the Arkansas Dental Society. More than 25,000 first grade students in twelve years have visited the City Health Department for this program which included distribution of a pint of milk to each child.

Hidy also has been a teacher. The Little Rock City Health Department was the first in the United States to take advantage of the G. I. Program for sanitarians. A 22-hour course was offered for a two-year period at a Junior College and Mrs. Hidy became the instructor. During this same period, she also spoke to students at five major colleges in Arkansas on the "Role of the Teacher in School Health Education."

In 1948, she was elected "Citizen of the Week in Greater Little Rock" and in 1956 was selected as "Woman of the Year" for Arkansas and in 1965 she was "mother of the year".

Hidy also received the "Non-Nurse" Award of Merit from both the Arkansas State Nurses

*Arkansas Department of Health, Division of Public Health Education, 4815 West Markham, Little Rock, Arkansas 72205.

Association, 1966 and Arkansas League for Nursing, 1969.

Some of the other "special" awards include listings in *Who's Who in the South and Southwest*, *Who's Who of American Women* and *Arkansas Lives*. She also is a Countess in Pulaski County, a Fellow of the National Society of Public Health Educators, a Fellow of the American Public Health Association, member of the Little Rock Censor Board, a member of the Arkansas Public Health Association, Southern Branch of the American Public Health Association and numerous other civic and service organizations.

In the Arkansas Public Health Association, Hidy has been Secretary-Treasurer, 1950-52, and President in 1959. There have only been five times that she has not held an office or been a committee member. She originated the 25-Year Plaque of the Association and bestowed the first one the year she was president.

She has made presentations at public health meetings in Tennessee, Arkansas, Mississippi and Texas on the "Role of the Public Health Clerk". This particular presentation was published in full in the Texas Monthly Public Health Bulletin.

Mrs. Hidy believes that "people are never too busy to do anything they want to — if they want it badly enough." One of her "things" concerning this is to instill in young or old the desire to complete their education, no matter what the level. She feels that there is a necessity for a person to be trained and knowledgeable so he/she could use expertise to work and plan cooperatively with all people. She modestly admits to influencing 25 people in this way. She is again rewarded by the satisfaction of knowing she helped someone. In keeping with her ideal of education, the City Health Department was selected as a training center for students by the University of North Carolina who were candidates for Masters in Public Health and she became the supervisor of instruction for these students for a number of years.

Hidy's success is well documented and she openly admits to using "keys" to attain it. They are 1) gratitude — never fail to thank someone who has helped you — a note of thanks is a little thing, but it means so much to others and gives you much in return; 2) try to know people by name, it adds a personal touch — if you can't remember

it, write it down; 3) carry a note pad with you at all times so you can jot down information, 4) build a lasting trust with persons with whom you come in contact; and 5) try not to say "no" to a task unless it's an absolute necessity.

Catherine Hidy never planned to work. It would be hard to imagine just how much she would have done had she really planned a career.

The "chootz-pah" (pronounced hoots-pa) that emanates from Catherine Hidy has been felt by many and will be sorely missed in the coming years by all of us who are in public health.

In 1956, when she was voted "Woman of the Year", Hidy received a plaque of recognition. The words on this plaque sum up the work and life of — public servant, Catherine Hidy. They are: "To you must certainly go the title 'self-made career woman'. At great sacrifice, you studied long and hard to learn the skills of public health and then returned to this community, where for almost 20 years (now 34) you have used them tirelessly to improve the welfare of its citizens."

Catherine Dees Hidy has been, is and always will be a tribute to public health, both in and away from Arkansas.



ANSWER—Electrocardiogram of the Month

Sinus rhythm — atrial and ventricular rates = 84/min.
PR = 0.18 QRS = 0.12 to 0.14 QT = 0.40

The initial portion of the QRS complex is quite normal in the horizontal plane, moving anteriorly and leftward. In the frontal plane it is slightly unusual in that it moves immediately inferior, but for only a brief interval. The QRS complex is then inscribed steeply upward, somewhat anteriorly and leftward. The terminal QRS is slowly drawn superiorly, rightward and anterior. This, then is typical of right bundle branch block and left anterior fascicular block. This is a strange situation for a 35-year-old female, and particularly significant when associated with a congenital heart defect. The phonocardiogram shows a rather harsh systolic murmur, and possibly prominent P₂.

This all fits rather nicely into the condition of a persistent A-V conduction defect. These patients characteristically have 1) posterior, inferior displacement of the AV node; 2) short node to origin of the left bundle; 3) thus posterior-inferior displacement of the left bundle; 4) relative hypoplasia of the left anterior fascicle. Excitation of the ventricle therefore occurs relatively early via the left posterior fascicle, with relatively RBBB and LA Hemiblock — compounded by some RVH. (*Circulation*: v.42, p.437, 1970)



EDITORIAL

Injecting Science into the Acupuncture Picture

Louis R. Munos, M.D.*

The first results of American acupuncture research done under the aegis of the NIH Ad Hoc Committee on Acupuncture are in, and they are a mixed bag. For one thing, at least some of the acupuncture points on the Chinese charts exist — and are found where the charts show them. But what they are in biological terms, and what acupuncture can and cannot do, are questions that haven't yet been answered.

Meeting in Bethesda, Maryland, for the committee's first conference, 110 researchers heard 45 papers on a variety of studies and proposals. Guidelines laid down last July recommended research into acupuncture's effectiveness as a surgical anesthetic and as an analgesic in cases of chronic pain. The committee also called for basic studies of how acupuncture works and what side effects it might produce.

By measuring electrical, thermal, and chemical characteristics, Dr. Thelma Moss of the neuropsychiatric institute at UCLA's medical school also confirmed the presence of many traditional acupuncture-point sites. And some evidence that the classical Oriental belief in an energy flow along acupuncture meridians was reinforced by her experiments with radiation-field photography. She and her associates found that gaps in the "corona" that appears around people's fingertips in such photographs filled in when the hands were rephotographed during acupuncture. "Is this a flow of energy along the meridians?" Dr. Moss wondered.

Xylocaine blocks were used by Dr. Moss to create a temporary sympathectomy in volunteers whose hands were then imaged by radiation-field photography. The hand on the unaffected side lost its corona during the block, but current-flow readings at acupuncture points were as high as

3,000 nanoamperes; readings taken at acupuncture points on the other hand registered only 165 nanoamperes. "This indicated to us that there was an imbalance of energy," said Dr. Moss, "that may very well correspond to a basic tenet of ancient acupuncture theory."

In a controlled study of eight osteoarthritis patients, Dr. Matsumoto located their most tender spots and found that 60% of the sites showed low skin resistance and corresponded to classic acupuncture points. He used manually twirled acupuncture needles at points of high tenderness and low skin resistance in four of these patients, and applied needles at points about 2 cm. from the classic locations in the other four.

All patients in the first group felt some pain relief and two were discharged within the week. The control patients felt little or no relief for the first three days. On the fourth day, Dr. Matsumoto switched to their real acupuncture points, and they duplicated the response of the first group — two were discharged within days.

Duplicating the experiment with two other groups, this time with electrically stimulated needles, produced results that were virtually identical to those of the earlier test, Dr. Matsumoto reported.

Of 44 patients needled at accepted meridian points, 37 reported pain relief of various degrees. In a second group of 13 patients, ten reported relief of pain when needled at the correct sites. But in a second trial, needles inserted at incorrect or placebo points brought relief to only three of the 13.

But when a group from his department tried the placebo technique on 18 patients at the Gainesville VA hospital, about 60% of them reported at least 50% relief, even though the treat-

*Village Medical Clinic, Cherokee Village, Arkansas 72542.

ment consisted of random subcutaneous insertion of four 27-gauge disposable needles. We are surprised, however, that this procedure was twice as effective as other placebo treatments. This may be more than a chance observation.

The oft-made suggestion that acupuncture is a form of hypnosis was disputed by Dr. Kinichi Shibutani, Director of Anesthesiology at Grasslands Hospital in Valhalla, New York. A group of 59 patients referred to the hospital's pain clinic were scored on a personality profile and

hypnotizability test, he said. And "patients with low hypnotizability scores responded to acupuncture just as well as those with high scores."

"I think that the evidence presented suggests that acupuncture does have effects that should be of interest to medical science," concluded the committee's chairman, Dr. John J. Bonica, Professor and Chairman of Anesthesiology at the University of Washington. "Preliminary results indicate that it might be useful in pain problems and may be effective in producing anesthesia for some surgical procedures."



M E D I C I N E I N T H E



Office Orthopaedics is a new section which will be published each month. All Orthopaedists are invited to submit articles for this section.

* * *

THE MONTH IN WASHINGTON

The debate concerning the right of large states to establish statewide Professional Standards Review Organizations (PSRO's) has apparently come to an abrupt halt with the government saying "no" in a loud and clear voice.

The Department of Health, Education and Welfare announcement came only 10 days after it had released a statement that said under certain circumstances it would consider naming a statewide PSRO in big states where there is support for it among the interested medical and health groups.

Though an about face was denied by Henry Simmons, M.D., Deputy HEW Assistant Secretary for Health and acting head of PSRO, there was an apparent conflict between the statement given earlier to the PSRO Advisory Council and the final decision.

The designated PSRO areas which will be announced by late November or early December

will include no area having many more than 3,000 physicians within it, Dr. Simmons told a news conference in his office. He conceded there is no such limitation in the PSRO law, but the 2,500-physician level suggested in the report by the Senate Finance Committee was "reasonable" but not "rigid".

The area selections will be in the form of proposals printed in the Federal Register giving interested parties 30 days in which to comment. The possibility remains that some changes could be made before the designations become final, but Dr. Simmons did not talk as if there was much chance of that happening.

In the earlier statement given the Advisory Council, Dr. Simmons said: "There are a few states with a larger number of physicians that have requested that they also be designated as single state PSRO's and have obtained backing of their medical, osteopathic, and hospital associations and, in some instances, government. In such instances, we will individually consider designation of a statewide PSRO if the statewide PSRO has support of physicians throughout the state and agrees to further subdivide itself . . .

and if control of the review process remains at the local levels. . . .

"Thus, in states with a large number of physicians which nevertheless opt for a statewide PSRO, it is clear that the review of care would be controlled and performed locally . . . "

Members of the Council interpreted this as indicating that HEW in some cases might okay a statewide PSRO in large states.

Dr. Simmons also told the news conferences that guidelines will be issued in February on how organizations can apply to become PSRO's within the designated areas. By next June, he said, the hope is to have 50 PSRO's chosen. Within four to six weeks a PSRO bulletin will be sent to all physicians in the nation outlining the status of the program and informing them of PSRO developments.

He predicted from 20 to 30 small states will be single-state PSRO areas.

PSRO, said Dr. Simmons, is "probably the most sensitive program that has been mandated" for the medical profession "and one of the most important ever passed in terms of impact upon the profession and benefit to the public."

He praised the AMA for "very constructive steps" in developing diagnostic standards for PSRO and "very constructive work in general" with HEW in gearing up for the program. He conceded a difference of opinion with the AMA on the extent to which PSRO's would function at the state level.

* * *

Prior to the HEW decision against statewide PSRO's in large states, the Senate Finance Committee had tentatively approved a provision that would ban HEW from using a limitation on the number of physicians that may belong to a PSRO.

If enacted, the provision could make it easier for statewide PSRO's to win HEW approval.

At present, the Department is employing a general top limit of 2,500 physicians per review organization, a maximum guide that obviously would foreclose larger states from having a single organization to review institutional care for Medicare and Medicaid patients.

The amendment was sponsored by Sen. Lloyd Bentsen (D.-Texas) and agreed to by Sen. Wallace Bennett (R.-Utah), originator of the PSRO

concept and a staunch proponent of smaller PSRO units.

The language of the proposed Bentsen amendment reads: "In carrying out the provisions of this section, the Secretary may designate, as an appropriate area with respect to which a Professional Standard Review Organization may be designated, an area encompassing a whole State; and the Secretary shall not refuse to designate any qualified organization as the Professional Standards Review Organization with respect to such area solely because of the number of physicians participating in such Organization."

Whether or not the Senate committee action on a House-passed measure making technical changes in the Social Security Law would result in a significant change in HEW PSRO policy is not known at this time.

* * *

The present Congress won't act on a full-scale national health insurance program, predicts Sen. Wallace Bennett (R.-Utah).

Bennett, top Republican on the Senate Finance Committee which has jurisdiction over NHI, said such a national program would require new taxes to finance it.

"Congress is keenly aware of a strong and growing resistance to any increase in taxes for any purpose," he said. "To complicate the situation further, there is a real rivalry between the Administration and the Congress as to which can demonstrate the greatest fiscal responsibility.

"I don't believe the people really realize just how great the added tax burden must be to provide the billions needed to support some of the large-scale programs which have been proposed," Bennett said, adding that a health care bill sponsored by Sen. Edward Kennedy (D.-Mass.), would cost "an estimated \$70 billion."

Although ruling out the possibility of Congressional action on a full-scale national health insurance program, Bennett said it was possible that Congress might act on "some limited type of catastrophic health insurance coverage and improvements in Medicaid."

The Senator was referring apparently to the bill introduced by Finance Committee Chairman Russell Long (D.-La.) and Sen. Abraham Ribicoff (D.-Conn.), recently for a Social Security-financed catastrophic plan and federalization of Medicaid.

* * *

A growing public and professional awareness of the perils and prevalence of alcoholism and indications society finally is gearing to grapple with the problem meaningfully were reported at the Conference on Medical Complications of Alcohol Abuse presented by the American Medical Association in Washington, D. C.

Cautious optimism, a feeling that perhaps a corner had been turned, marked the attitudes and statements of many of the 300 speakers and participants at the Conference co-sponsored by the National Council on Alcoholism and the National Institute on Alcohol Abuse and Alcoholism (NIAA).

The meeting came at a time Congress is voting millions of additional dollars for federal alcoholism programs and the Administration is upgrading the effort within the HEW Department.

Morris Chafetz, M.D., Director of the NIAA, said, "it is time we stopped blaming sick people for their own illness and our inability to provide appropriate treatment — especially since the caregivers are in fact the very ones who have conspired to stack the cards against them."

The AMA first recognized alcoholism as an illness back in 1956, Dr. Chafetz said, "yet even today more than half of our nation's hospitals will not admit patients with a primary diagnosis of alcoholism."

The medical profession itself loses 400 physicians, the entire enrollment of a medical school, to alcoholism every year, the psychiatrist said. "When we measure the magnitude of human suffering against the plain reality that alcoholic people are indeed treatable, then I believe that the biggest tragedy and shame of all will occur if the health and medical professions continue to fail to exercise their proper responsibility to help the millions of victims of this epidemic illness."

Another speaker, Maj. Gen. Frank Clay, Deputy Assistant Secretary of Defense, (Drug and Alcohol Abuse), cited "noticeable progress" in the military's six-month-old attack on the tradition of the GI as not only a hard fighter but a hard drinker. "Treatment will be available for every individual who wants treatment for alcoholism," Gen. Clay said.

Harry McKnight, Jr., of the Veterans Administration, said the VA operates the nation's largest unified system of alcoholism rehabilita-

tion with 61 special units that handled 131,000 alcohol abusers in the fiscal year 1973.

Marvin Block, M.D., Buffalo, N. Y., said "it is the obligation of the physician and hospital medical staffs as well as other personnel to see that the alcoholic patient receives the treatment indicated in the same way as any other sick person — with care and consideration. When this attitude becomes more prevalent, the stigma of the disease will be removed and people will present themselves for help before the disease is far advanced.

"With the medical profession as the central focus of detection and treatment, the scourge of alcoholism which is so prevalent today can be successfully defeated," he added.

Herbert Raskin, M.D., Chairman of the AMA's Committee on Alcoholism and Drug Dependence; and William Lukash, M.D., White House physician and program coordinator, told the meeting that such conferences help pave the way toward new attitudes by members of the medical profession and instill the knowledge necessary to cope with the problem of addiction to alcohol.

* * *

The total cost of educating a medical student in 1972 ranged from \$16,000 to \$26,000 a year in 12 selected medical schools, the Association of American Medical Colleges reported. Direct instructional expenses accounted for about 40 percent of the total educational costs for an undergraduate medical student. Research, clinical activity, and administrative and professional activities accounted for the remainder.

* * *

The American Medical Association has proposed a regional center national blood program to resolve the differences among major blood-collecting organizations and meet the threat of a Federally-mandated program.

At a meeting of interested groups, including labor and consumers, at the HEW department, there was praise for the AMA plan from some participants. But a consensus has not developed immediately. At the AMA's suggestion, a third meeting was called to be held by the AMA in Chicago in a further attempt to respond to the directive of HEW Secretary Casper Weinberger that a national voluntary blood donor system be set up by existing agencies or he would impose a solution through legislation or fiat.

* * * * *

The American Medical Association has told the Congress that legislation is now appropriate to assure the safety and effectiveness of medical devices.

However, William R. Barclay, M.D., AMA's Assistant Executive Vice President, told the House health subcommittee that controls should be kept to a minimal level to assure that regulations will not restrict the flow of useful devices to the marketplace.

"Device standards must be practical," Dr. Barclay said, "and while they should strive fully to meet the goals of protection and safety, they must be realistic and not withhold from patients the benefits of scientific advances."

* * *

The HEW Department has sent the White House a proposed national health insurance program weighted toward catastrophic coverage.

Though HEW aides insisted the plan was more of a "series of concepts" than a final program, the broad outlines of the HEW scheme are likely to be retained in the final bill sent to Congress next year by President Nixon.

The old mandated employer idea is retained in the new plan. Through private health insurance companies, companies must offer employees minimum benefit insurance protection and pay 75 percent of the premium tax. Enrollment in a Health Maintenance Organization (HMO) must be allowed workers as an option if available. The label given this plan is Standard Employer Plan (SEP).

For poor people, a Government Assurance Program (GAP) would replace Medicaid. This would offer sliding-scale Federal subsidization for health insurance that would have the same minimum benefits as the SEP plan. The very poor would pay nothing for the premium; those making more would pay up to \$300 a year.

Higher income people not covered by SEP could enroll in GAP.

In no case, under the HEW draft, would any family have to pay out-of-pocket more than \$1,600 a year in health bills.

The proposal would provide coverage of hos-

pitalization, most physicians' services, some mental health care, limited dental care, and out-patient drugs on a deductible basis. Estimated total costs of the SEP premium is \$600 annually.

The plan calls for a medical credit card for all enrollees. Insurers would pay providers and bill patients for services not covered.

* * *

MINUTES

ARKANSAS FOUNDATION FOR MEDICAL CARE

The Corporate Members of the Arkansas Foundation for Medical Care met at 3:35 p.m. on Sunday, November 25, 1973, in the Sheraton Hotel in Little Rock, with President C. C. Long presiding.

President Long presented the proposed revision in the By-Laws of the Foundation. Upon motion of Orr and Chudy, the Corporate Members voted to adopt the proposed revision of the By-Laws as amended to provide for proxy voting.

Dr. Long advised those present that the Foundation would function with only an executive vice president until such time as a meeting of the Foundation members could be held to elect new officers.

The meeting adjourned at 3:55 p.m.
C. C. Long, M.D.
President

* * *

Prescriptions for Out-of-Town Patients

The Arkansas Pharmaceutical Association has asked for assistance from physicians when prescribing medication for an out-of-town patient. The APA has suggested that physicians ask the patient for his pharmacist's name and telephone number. Then call the pharmacist collect and give him the prescription instead of telling the patient to have his pharmacist call you for the prescription. The pharmacists say that it is often necessary to place more than one call in trying to reach the physician due to the fact that he is with a patient, out of the office, etc. The pharmacists feel that this method of prescribing for an out-of-town patient would result in time and energy saved by both the physician and the pharmacist.





PERSONAL AND NEWS ITEMS

Physician Relocates

Dr. C. G. Pearce has recently opened his office in Clinton, Arkansas, for the general practice of medicine. Dr. Pearce was associated with the Veterans Administration Hospital in Little Rock for the past twelve years.

Doctors Attend Meeting

Dr. Henry V. Kirby and Dr. G. Allen Robinson, both of Harrison, attended the 67th Annual Scientific Meeting of the Southern Medical Association which was held November 11-14, in San Antonio, Texas.

Dr. Coffey Honored

Dr. George Coffey of Hot Springs was named "Doctor of the Year" by the Garland County Medical Assistants Society at their annual Bosses' Night Banquet which was held in November. Dr. William R. Mashburn was chosen as runner-up for the award.

Achievement awards were presented to Dr. William R. Mashburn, Dr. Thomas E. Burrow, Dr. William Y. Springer, Dr. Joseph L. Rosenzweig, Dr. Walter G. Klugh, Jr., and Dr. Patrick L. Knight, all of Hot Springs.

Physician Elected

Dr. Ernest H. Harper of North Little Rock has been elected to the Board of Directors of the First American National Bank of North Little Rock.

Dr. Clower Named Fellow

Dr. John D. Clower of Rogers has been selected as a Fellow of the American Society of Abdominal Surgeons.

Doctor Completes Course

Dr. Guilford M. Dudley of Newport recently completed a course in Clinical Management and Control of Tuberculosis at the National Jewish Hospital and Research Center in Denver, Colorado.

Speakers Bureau

The following physicians are participating in the Speakers Bureau of the Arkansas Medical Society and have filled the following speaking engagements:

Dr. Mahlon O. Maris of Harrison spoke to the Harrison Lions Club on December 5, 1973. Dr. Maris' topic was "Socialized Medicine and You." Dr. George Collier of Paragould addressed the Jonesboro Jaycettes on December 6, 1973, on the subject "Drug Addiction." Dr. Taylor Prewitt of Fort Smith spoke to the Van Buren Lions Club on December 12th on "New Developments in Heart Disease." Dr. Jerry Stewart of Fort Smith was the guest speaker at the December 21st meeting of the Noon Exchange Club in Fort Smith. Dr. Stewart spoke on "New Drugs and Therapy in Medicine."

Dr. Lawson Elected

Dr. Larry Lawson of Paragould has been chosen to serve a three-year term on the Community Methodist Hospital Board of Trustees. Dr. Jacob M. Williams of Paragould was recently appointed to the Board to complete the unexpired term of a deceased Board member.

Physicians Elected to AAFP

Dr. James C. Bethel of Little Rock and Dr. Stanley D. Teeter and Dr. James M. Carter, both of Russellville, have been elected to active membership in the American Academy of Family Physicians.

Dr. Gene D. Ring of Dardanelle has been re-elected to active membership in the American Academy of Family Physicians.

Physicians Locate

Dr. Robert E. Price is now affiliated with the Harris Hospital and Clinic in Newport for the practice of family medicine and obstetrics.

Dr. Doty Murphy has joined Dr. Calvin D. Austin in practice at the Austin Medical Clinic in Mena, Arkansas. Dr. Murphy specializes in pediatrics, but he will also practice general medicine.

Dr. John McIver Hodges, an otolaryngologist, has opened offices in the Medical Center in West Memphis.

Dr. Eleanor Thornton recently began practicing in Marianna, Arkansas. Dr. Thornton's office is located on Main Street.

Doctors Inducted as Fellows

The following physicians have been inducted as Fellows of the American College of Surgeons: Dr. Johnson J. Baker, Dr. Warren C. Boop, Jr., Dr. James F. Kyser and Dr. John F. Redman, all of Little Rock; Dr. Larry Lawson of Paragould; Dr. John H. Moore of El Dorado; Dr. Michael Rudko of Fayetteville; and Dr. Phillip M. Utley of Jonesboro.

Dr. Chrestman's Clinic Guttled by Fire

Dr. Reuben Chrestman's clinic on Oakland Avenue in Helena was burglarized and set on fire on the morning of November 27th. The interior of the offices were gutted by the fire and damage was estimated to be \$12,000.

Dr. Jansen Elected

Dr. G. Thomas Jansen, a Little Rock derma-

tologist, was elected Chairman of the Council of the Southern Medical Association at their annual scientific meeting in November.

Physicians Receive Awards

Three leaders of the Arkansas Caduceus Club have received special citations from Dr. James L. Dennis, vice president for health sciences, for "continued devotion and unselfish service to the University of Arkansas School of Medicine." The recipients are Dr. Neil E. Crow of Fort Smith, Dr. Nathan L. Poff of Heber Springs, and Dr. Robert F. McCrary, Sr., of Hot Springs.

Dr. Crow is president of the Caduceus Club; Dr. Poff is immediate past president and Dr. McCrary is chairman of the committee on Legislation of the Caduceus Club.



NEW MEMBERS

Dr. Robert Hughes Millwee, III

Dr. Robert H. Milwee, III, has been accepted for membership in the Garland County Medical Society. Dr. Millwee is a native of Dallas, Texas. He received his pre-medical education at the University of Texas at Austin, being granted a B.A. degree in 1961. In 1964 he was graduated from the University of Michigan Medical School in Ann Arbor. His internship was completed at Detroit General Hospital. Dr. Millwee's residency work in General Surgery was at the Veterans Administration in Dallas, Texas. From 1969 until 1973, he was in residency training in Urology at Parkland Hospital in Dallas and, during that time, he served as resident instructor.

Dr. Millwee is associated with Dr. Thomas E. Burrow in the practice of Urology at 903 West Grand in Hot Springs.

Dr. Richard Joseph Nasca

Dr. Richard J. Nasca has been accepted for membership in the Pulaski County Medical Society. He was born in Elmira, New York. Dr. Nasca received a B.S. degree from Georgetown University in Washington, D.C., in 1960 and was graduated from Georgetown University School of Medicine in 1964. He interned at the Hospital of the University of Pennsylvania in Philadelphia. During 1965-1966, he received training in General Surgery at Duke University Hospital in Durham, North Carolina, and his residency work in Orthopaedic Surgery was at Duke University Hospital, the Veterans Administration Hospital in Durham and the Shriner's Hospital in Greenville, South Carolina.

Dr. Nasca is board certified by the American Board of Orthopaedic Surgery. He holds teaching appointments at the University of Arkansas Medical Center, the Veterans Administration Hospital and Arkansas Children's Hospital.

Dr. Nasca is with the Department of Orthopaedics at the University of Arkansas School of Medicine.

Dr. John Edward Slayden

Dr. John E. Slayden, a native of Poplar Bluff, Missouri, is a new member of the Pulaski County Medical Society. He attended Arkansas State University in Jonesboro and the University of Arkansas School of Medicine in Little Rock,

graduating in 1962 and 1966, respectively. Dr. Slayden completed his internship at St. Vincent Infirmary in Little Rock and his residency work in Radiology was at the University of Arkansas Medical Center.

Board certified by the American Board of Radiology and the American Board of Nuclear Medicine, Dr. Slayden is with the University of Arkansas Medical Center and serves as Assistant Professor of the Department of Radiology Division of Nuclear Medicine.

Dr. Jerry Shong-Yung Wang

Dr. Jerry S. Wang has been accepted for membership in the Pulaski County Medical Society. A native of Hunan, China, Dr. Wang received a B.A. degree in 1947 from Hunan University, Hunan, China, and he was graduated from the National Defense Medical Center in Taipei,

Taiwan, China, in 1953. His internship was completed at the First Army General Hospital in Taipei. His residency work in Anesthesiology was at the Down State Medical Center, Kings County Hospital in New York, the University of Tennessee City of Memphis Hospitals, and the University of Alabama Hospitals and Clinics in Birmingham.

Dr. Wang is a member of the American Society of Anesthesiologists. Since June 1973, he has been in practice at 518 Medical Arts Building in Little Rock.

The following residents are new members of the Pulaski County Medical Society:

University of Arkansas Medical Center

Nicholas P. Lang — Surgery

James Y. Massey — Ophthalmology



THINGS



**TO
COME**

Hair Transplant Symposium and Workshop

A Hair Transplant Symposium and Workshop will be held February 8th and 9th, 1974, at the Stough Dermatology and Cutaneous Surgery Clinic, P.A., Doctors Park, Hot Springs, Arkansas. The conference, which is co-sponsored by the American Society for Dermatologic Surgery and the American Academy of Facial Plastic and Reconstructive Surgery, Inc., is designed to offer an opportunity for the exchange of ideas among various disciplines and to present the latest advances in techniques on hair transplantation. Faculty will include dermatologists, otolaryngologists and general plastic surgeons. Attendance will be limited. For further information contact D. B. Stough, III, M.D., Program Director, Doctors Park, Hot Springs, Arkansas 71901.

International Conference in Gastroenterology to be Held

The Symposia Medica Foundation will present an International Conference on Clinical Problems in Gastroenterology, to be held in Jerusalem and Rome, March 12-24, 1974. For further information contact: Miss Cynthia Soika, M.A., Projects Director, Symposia Medica Foundation, 305 East 24th Street, New York, New York 10010.

Postgraduate Course in Pediatrics...

The 23rd Annual Postgraduate Course in Pediatrics of The University of Texas Medical Branch will be held in Galveston, Texas, March 14 and 15, 1974. The course will be entitled "Pediatric Potpourri" with guest lecturers Paul Wehrle, M.D., Elliot Ellis, M.D., and Marvin Cornblath, M.D.

The program is acceptable for 12 prescribed hours by the American Academy of General Practice and registration fee will be \$75.00. Further information will be furnished by Lillian H. Lockhart, M.D., Chairman, Pediatric Postgraduate Committee, The University of Texas Medical Branch, Galveston, Texas 77550.

Cardiopathy Of Aging II

Cardiopathy of Aging II, sponsored by the Veterans Administration, the Council on Clin-

ical Cardiology of the American Heart Association, the University of Arkansas School of Medicine and the Arkansas Heart Association, will be held in Little Rock, April 11-12, 1974.



PROCEEDINGS OF SOCIETIES

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 10:00 a.m. on Sunday, November 25, 1973, at the Sheraton Hotel in Little Rock. The following members of the Council were present: Long, Wood, Saltzman, Farris, Shuffield, Kirkley, Fairley, J. Bell, Paul Gray, P. Bell, Inman, Burge, Irwin, Jameson, Harris, McCrary, Bethel, Orr, Kolb, Kirby, Henry, Koenig, Chudy, Wilkins, Verser, Ellis, Hyatt, Fowler, and Watson. Mr. Warren, Mr. Schaefer, Miss Richmond, Mr. McIntosh, and Mr. Paul Harris were also present.

The following guests were in attendance: Noel Ferguson, Mahlon Maris, Senator Lex Moore, R. H. Langston, E. N. McCollum, Carl Chambers, Charles Daniel, James Dennis, G. Thomas Jansen, Kemal Kutait, George Burton, Edgar Easley, F. A. Buchanan, A. C. Bradford, Bryant Swindoll, Durwood Wisdom, Raymond Biondo, James Sanders, Jerry Lawson, Jim Lytle, George Mitchell, D. L. Owens, Purcell Smith, J. A. Harrel, A. J. Brizzolara, Howard Harris, Joe Beasley, Jerry Holton, J. P. Price, Donald L. Toon, Warren Murry, and Jean Gladden.

The Council transacted business as follows:

1. Upon the motion of Kolb and Koenig, the Council approved actions of the Executive Com-

mittee taken at meetings on August 29 and October 24:

A. Selected Dr. Raymond Miller and Dr. W. Payton Kolb to serve as additional Society representatives to Arkansas Health Systems Foundation.

B. Approved travel expenses for Dr. Buchanan to attend Conference on School Health.

C. Directed headquarters office to encourage membership to write their congressmen urging that physicians be removed from Price Controls.

D. Agreed to designate Society representative to the Medicaid Drug Program Peer Review Committee.

E. Approved Society sponsorship of a Scandinavian Adventure by INTRAV for departure from Little Rock on July 30, 1974.

F. Agreed to co-sponsor with Oklahoma and Kansas a two-hour, one evening hospitality suite during the AMA meeting in Anaheim.

G. Approved hosting a luncheon every other month for the Joint Physician-Nurse Practice Committee.

H. Recommended that the By-Laws of the Arkansas Foundation for Medical Care be amended to include membership of osteopaths.

2. Approved the following nominees for the Regional Peer Review Committees of Paid Prescriptions, the carrier for the Arkansas Medicaid Drug Program:

Northwest Region, Boyce West, Clarksville, Representative; Kemal Kutait, Fort Smith, Alternate.

Northeast Region, G. Wayne Taylor, Jonesboro, Representative; Charles Kemp, Jonesboro, Alternate.

Southwest Region, John Trieschmann, Hot Springs, Representative.

Southeast Region, Joseph S. Robinette, Pine Bluff, Representative.

Central Region, Guy R. Farris, Little Rock, Representative; Julian Foster, Little Rock, Alternate.

Upon the motion of Wood and Koenig, the Executive Committee was asked to select nominees for alternate representatives for the Southwest and Southeast regions.

3. Upon motion of Orr and Koenig, the Council approved the proposed revision in the By-Laws of the Arkansas Foundation for Medical Care.

4. The Council received for information a report by Dr. Harrel that effective in December the Health Department would make Immune Serum Globulin available to people exposed to infectious hepatitis. Dr. Harrel also asked the councilors to express thanks to the physicians in their districts for their participation in the Immunization Project recently conducted.

5. Upon motion of Saltzman and Irwin, the Council voted to sanction a proposal by Robert Watson that the Neurosurgeons of the State organize as a specialty group.

6. The Council heard a report from President John Wood on the Auxiliary's request for Society support for the Dr. and Mrs. W. R. Brooksher Student Loan Fund. Upon the motion of Koenig and Irwin, the Council voted to:

A. Refer the request for financial assistance to the Budget Committee for its consideration;

B. Refer all future requests for financial assistance to the Budget Committee prior to Council consideration;

C. To provide assistance for such memorial loan funds by periodically including requests for individual donations in material mailed to Society members.

7. Upon the motion of Orr, the Council voted to approve the annual report of audit of the Arkansas State Medical Board.

8. The Council received for information a report from Dr. Elvin Shuffield, Chairman of the Legislative Committee, regarding the proposal by Senator Moore of El Dorado that there be a feasibility study by the Legislature on creating a Department of Community Medicine at the University of Arkansas School of Medicine. The consensus was that the Legislature should not

attempt to establish the curriculum at the Medical School.

9. Dr. W. Payton Kolb reported on a Mental Health Conference which he attended as a Society representative. He reported specifically on court actions regarding the patient's right to treatment.

10. Dr. F. R. Buchanan reported on the Conference on Physicians, Schools and Communities which he attended. Dr. Buchanan recommended that the Arkansas Medical Society committee structure be changed so that there would be a comprehensive health education committee separate from "sports activities".

11. Upon the motion of Koenig and Saltzman, the Council approved applying for membership in the American Association of Foundations for Medical Care and the American Association of Professional Standards Review Organizations. By the same motion, the Council also authorized the Society's legal counsel to visit the headquarters office of AAFMC to confer with the staff on implementation of PSRO.

12. The Council voted, upon motion of Kirby and Koenig, to instruct the Society's delegates to the American Medical Association to support the resolution to be introduced by the California delegation calling for action to have physicians removed from Price Controls.

13. The Council heard a report from Mr. Schaefer that a member of the faculty of the University of Arkansas School of Law at Fayetteville had written alleging that all Springdale physicians except one were combining to refuse treatment to Medicaid patients. Upon the motion of Kolb and Orr, the Council voted to ask the State Medical Board to accept responsibility for following developments in the matter and report back to the Council.

14. The Council heard a request from the Division of Communicable Disease of the State Health Department for funds to provide a communicable diseases publication to new physicians during 1974. Upon the motion of Kirkley, the Council referred the request to the Budget Committee.

15. Dr. Ben Saltzman presented a proposal by the Public Health Department for a program on Venereal Disease Control and asked for approval of the Medical Society. The program was approved upon motion of Saltzman and Irwin.

16. The Council heard representatives of the Benton and Boone County Medical Societies discuss their request that the Society take a stand of non-compliance with the PSRO provisions of Public Law 92-603. After considerable discussion, it was proposed by a representative of Boone County that instead of a stand of non-compliance, the Foundation go ahead with setting up the framework for PSRO designation but that there be no action taken to implement PSRO until the spring meeting of the Medical Society. A motion by Kirkley to that effect was withdrawn. The Council Chairman advised that it was past time for adjournment of the meeting and suggested that perhaps the issue could be resolved at a meeting of the Arkansas Foundation for Medical Care.

The Council adjourned at 12:20 p.m.

Approved: C. C. Long, M.D.

Chairman of the Council

* * * * *

MINUTES, HOUSE OF DELEGATES

The House of Delegates of the Arkansas Medical Society met at 2:20 p.m. on Sunday, November 25, 1973, at the Sheraton Hotel in Little Rock. The following delegates, officers and members seated as delegates were present:

ASHLEY, Donald L. Toon; BENTON, E. N. McCollum; BOONE, Mahlon Maris, BRADLEY, George Wynne; CHICOT, Charles D. Blackmon; CRAIGHEAD-POINSETT, Durwood Wisdom, James Sanders; CRAWFORD, Millard C. Edds; DALLAS, Jack T. Dobson; DESHA, Howard Harris; DREW, J. P. Price; FAULKNER, Charles Archer; FRANKLIN, David L. Gibbons; GARLAND, Robert Hill; GRANT, Curtis B. Clark; GREENE-CLAY, J. Larry Lawson; HEMPSTEAD, Forney Holt; HOT SPRING, Robert H. White; INDEPENDENCE, Jim Lytle; JEFFERSON, Donald L. Miller; JOHNSON, Boyce West; LAWRENCE, Ralph Joseph; MILLER, Donald L. Duncan; MISSISSIPPI, Joseph Beasley; MONROE, N. C. David, Jr.; NEVADA, H. Blake Crow; PHILLIPS, Robert D. Miller, Jr.; POPE-YELL, James D. Harbison; PULASKI, F. R. Buchanan, Frank Westerfield, Winston Shorey, Curry Bradburn, Paul Cornell, Edgar Easley, Robert D. Dickins, Jr., Guy R. Farris, Charles Logan, G.

Thomas Jansen, J. A. Harrell, Raymond Biondo, Ashley Ross, George Mitchell, Mayne Parker, Purcell Smith; SEBASTIAN, Jerry Holton, Carl Williams, A. C. Bradford, Samuel E. Landrum, Kenneth E. Lilly; SEVIER, James I. Balch; ST. FRANCIS, G. A. Sexton; UNION, C. E. Tommey; WASHINGTON, John M. Boyce, W. Ely Brooks; COUNCILORS, Eldon Fairley, John B. Kirkley, Paul Gray, John Bell, Fred Imman, L. J. Pat Bell, Raymond Irwin, John P. Burge, C. Lynn Harris, James C. Bethel, Robert McCrary, W. Payton Kolb, William S. Orr, Morris Henry, Henry V. Kirby, C. C. Long, A. S. Koenig; PRESIDENT, John Wood; PRESIDENT-ELECT, Ben N. Saltzman; FIRST VICE PRESIDENT, Guy R. Farris; SPEAKER, Amail Chudy; VICE SPEAKER, Charles F. Wilkins, Jr.; SECRETARY, Elvin Shuffield; PAST PRESIDENTS, Joe Verser, C. R. Ellis, C. Lewis Hyatt, Ross Fowler, and Robert Watson. Representatives of the Senior Class at the Medical School also were present: Thomas Jefferson, Christina Jefferson and Carol Chappell.

Speaker Chudy called on Past President C. Lewis Hyatt for the invocation.

Representatives of the Benton and Boone County Medical Societies requested House consideration of their request that the Society take a stand of non-compliance with the PSRO provisions of Public Law 92-603. Noel Ferguson spoke explaining the reasons for the county societies' action. After lengthy discussion of the proposal, E. N. McCollum of Benton County presented a motion to amend the request of the county societies to "take a stand of non-compliance with the PSRO provisions of Public Law 92-603 until the next spring meeting or a called meeting of the House of Delegates of the Arkansas Medical Society". This amendment was defeated. The House then voted on the original proposal for non-compliance and it was also defeated.

The House of Delegates received for information a report from the Secretary of the State Medical Board, Dr. Joe Verser, regarding a hearing on Physicians' Assistants by one of the committees of the Legislature.

The House voted to approve the By-Laws of the Arkansas Foundation for Medical Care as revised.

The House adjourned at 3:32 p.m.
Approved: Amail Chudy, M.D.
Speaker, House of Delegates

Benton County Medical Society

The Benton County Medical Society has announced the following slate of officers to serve in 1974: Dr. James D. Huskins of Siloam Springs. President; Dr. Billy J. Puckett of Siloam Springs,

Vice President; Dr. William F. Webb of Decatur, Secretary-Treasurer, and Dr. Edward N. McCollum of Decatur, Delegate.

Boone County Medical Society

Mr. Frank K. Wooley, Executive Director of the Association of American Physicians and Surgeons, was the guest speaker at the November meeting of the Boone County Medical Society.



O B I T U A R Y

Dr. Waldo Atwood Regnier

Dr. W. A. Regnier of Crossett died November 14, 1973, at the age of sixty-eight. He was born in 1905 in Humphrey, Arkansas.

Dr. Regnier received his pre-medical education at Hendrix College in Conway and was graduated from the University of Arkansas School of Medicine in 1931. Before moving to Crossett in 1939, Dr. Regnier served on the staff of the Arkansas State Hospital for three years and he served as the first superintendent of the State Hospital at Benton.

Dr. Regnier served as a flight surgeon with the United States Army during World War II. He was an honorary member of the Administrative Board of the First United Methodist Church of Crossett, a Mason, and a Shriner.

He was a member of the Ashley County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Regnier is survived by his wife, Mary, one son, one daughter, two brothers and two sisters.



Opportunities to Practice Medicine in Arkansas

ATKINS. Population 2,500, trade area 6,000-8,000. Opportunity for association with GP. Modern clinic. Guarantee. Rapidly developing area.

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MENA. Real need for additional GP. Town of 4,500 has 4 GP's and 1 surgeon. Progressive community with 57-bed general hospital, active aviation interest. Good hunting and fishing area.

VAN BUREN. Opportunities for GP, Pediatrician, and obstetrician-gynecologist. Free office space for one year. 99-bed hospital being expanded. Near Fort Smith.

CAVE CITY. Town of 1,000, good opportunity for solo practice, office space available in modern clinic. One physician in town anxious to have another physician locate there.

McCRORY. Population 1,300; 2 GP's want GP to join well-established clinic. Salary negotiable. New clinic building. 34-bed hospital. Good hunting and fishing in area.

WALNUT RIDGE. Population 4,000. Physicians anxious to have other doctors begin practice. 3 GP's, 1 surgeon and 1 internist desired. 50-bed hospital. Group practice available.

BRINKLEY. Opportunities in FP, Surgery and Obstetrics-Gynecology in town of 5,000. 5 physicians in practice, 42-bed hospital is only hospital in county.

DE VALLS BLUFF. Need for physician in community of 800 without a practicing physician. About 20 miles to nearest physician, trade area population of about 4,000.

MORRILTON. Opportunity for General Surgeon. 6 GP's and 1 internist are practicing in town of 7,000. Office space available in clinic. 72-bed hospital with expanded surgical facilities.

MORRILTON. Young family practitioner seeking associate. Modern clinic with complete lab and x-ray facilities. No initial investment.

MOUNTAIN VIEW. Population about 2,000. 2 physicians in practice; need for two more GP's. 35-bed hospital. Mountain View experiencing increase in population. Good recreational facilities.

ASHDOWN. Opening for physician in general practice with clinic. 3 now on staff. Practice incorporated. Guarantee; full partnership in 3 years. 45-bed hospital in town.

BEARDEN. Population 1,300 with trade area of about 3,000. No physician in community. 2-physician clinic is available. Good industrial payroll for town with good insurance plans for employees of industries.

FOR FURTHER INFORMATION ON THESE AND OTHER OPENINGS CONTACT

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THE JOURNAL OF THE Arkansas MEDICAL SOCIETY

Vol. 70 No. 9

FORT SMITH, ARKANSAS

98th ANNUAL SESSION

ARKANSAS MEDICAL SOCIETY

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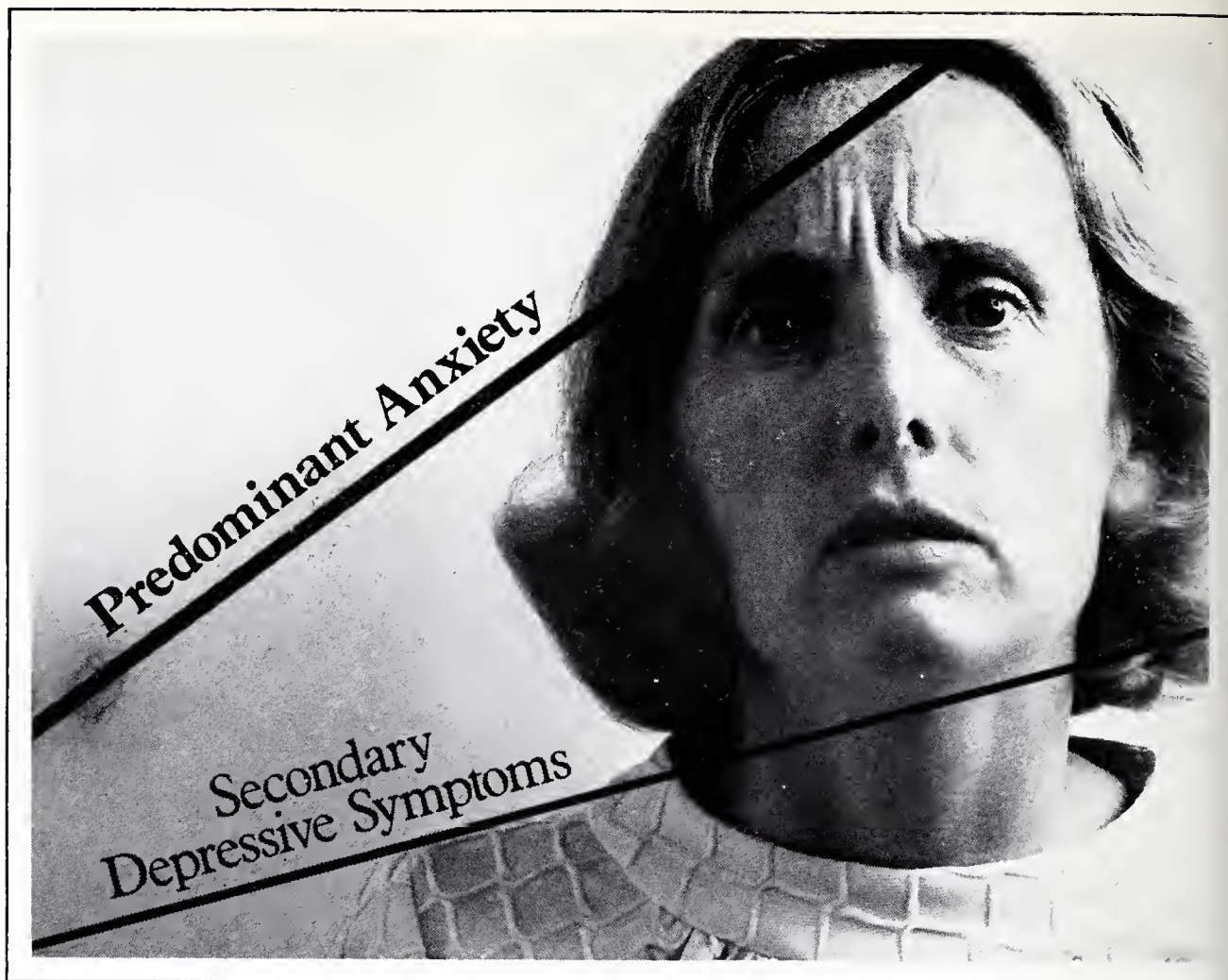
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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 9. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

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Congenital Glaucoma

George T. Schroeder, M.D.*

Congenital glaucoma is a severe and blinding disease which occurs rarely, about one case in every five years in an average ophthalmologist's practice. Its therapy is basically surgical and the results of the treatment can be amazingly good if diagnosis, referral and definitive treatment are prompt. It may occasionally be manifest at birth but onset is usually delayed some months with 80% of cases occurring within the first year of life. As with other relatively uncommon condi-

tions, the physician's degree of suspicion is important.

Congenital glaucoma may occur as an isolated finding but has been reported to occur in association with several systemic conditions (Table 1) and patients with these problems should be watched more closely for possible eye complications including glaucoma. Patients with Sturge-Weber Syndrome (encephalo-trigemino-angiomatosis) and Congenital Rubella Syndrome have a higher risk of glaucoma. A large number of local ocular abnormalities also are associated with a higher likelihood of glaucoma. These children will presumably already be under the care of an Ophthalmologist (Table 2).

The classical picture of congenital glaucoma is an eye that is sensitive to light, inflamed, tearing and frequently enlarged. With progression of the disease the increased intraocular pressure results in stretching of the cornea and sclera as in youth these structures are distensible, so that the eye and particularly the cornea are enlarged and the cornea becomes hazy or translucent when fractures develop in Descemet's

Systemic Conditions Associated
With Juvenile Glaucoma

Table 1

- The Phakomatoses:
 - Sturge-Weber Syndrome
(Encephalo-Trigeminal Angiomatosis)
 - Von Recklinhausen's Disease
(Neurofibromatosis)
 - Bourneville Syndrome (Tuberous Sclerosis)
 - Von Hippel-Lindau Disease
(Angiomatosis Retinae)
 - Lewis-Barr Syndrome
- Congenital Rubella Syndrome
- Congenital Syphilis
- Toxoplasmosis
- Trisomy 16-18
- Trisomy 13-15
- Trisomy 21 (Mongolism)
- Oculo-Cerebro-Renal Syndrome of Lowe
- Idiopathic Infantile Hypoglycemia
- Pierre-Robin Syndrome
- Hurler's Syndrome
- Marfan's Syndrome
- Marchesani's Syndrome
- Homocystinuria
- Turner's Syndrome
- Osteogenesis Imperfecta
(blue sclera, deafness, brittle bones)
- Rubenstein-Taybi Syndrome

Ocular Conditions Associated
With Juvenile Glaucoma or
Glaucoma of Youth or Young Adulthood

Table 2

- Aniridia
- Spherophakia
- High Myopia
- Keratoconus
- Retinitis Pigmentosa
- Microphthalmos
- Megalocornea
- Microcornea
- Sclero-cornea
- Ocular Inflammation or Neoplasm
- Hemangioma of Choroid
- Axenfeld's Anomaly
- Rieger's Anomaly

*Department of Ophthalmology, University of Arkansas Medical Center; Arkansas Childrens Hospital, Little Rock, Arkansas 72201. Reprint requests to: George Schroeder, M.D., 5700 West Markham, Little Rock, Arkansas 72205.

membrane. Photophobia is a key symptom and abnormal sensitivity to light should be considered due to glaucoma until proven otherwise in an infant.

Differential Diagnosis

Differential diagnosis of an inflamed, photophobic, tearing eye in this age group should include infection (conjunctivitis or corneal ulcer), iridocyclitis (idiopathic or due to an endogenous systemic disease), or unsuspected trauma (corneal abrasion or contusion injury). Infection alone among the inflammations listed above will be associated with purulence, discharge, or matting of the eyelids in the mornings. Photophobia is rarely a significant factor. The eye should be of normal size and the cornea should be crystal clear unless it is also involved. Any abnormality of the cornea demands ophthalmological consultation. Either the common bacterial or viral conjunctivitis usually improve rapidly with topical sulfacetamide or broad-spectrum antibiotic preparations applied frequently. Severe conjunctivitis in the newborn may be due to the gonococcus and systemic penicillin will be helpful in addition to topical treatment. Smears and cultures are indicated with severe inflammation.

Iridocyclitis (iritis) is rather uncommon in this age group except for traumatic iritis, and is characterized by circumcorneal injection of the deep episcleral vessels, absence of discharge, and a normal cornea. Some photophobia may be present.

Trauma with or without a history is probably the most common of the alternative diagnoses for the red photophobic eye in an infant. A simple corneal abrasion may be the source of marked symptoms and inflammatory signs. For this reason, fluorescein staining of the tear film and careful examination of the cornea with oblique white or blue light should be part of the evaluation of every inflamed eye. Simple abrasion responds rapidly to patching of the involved eye with prophylactic antibiotic ointments. If there is a secondary infection with a purulent discharge, the problem is more serious and may require a specialist's care.

An Examination Aid

Examination of the eye in an infant is frequently difficult. Lid spasm from the resisting child frequently everts the lid, blocking a view

of the globe. Frequently careful attention to pressing the lid margin down toward the globe of the infant with the tip of the examiner's finger will suffice to keep the lid from everting itself. This maneuver should be avoided if there is reason to suspect the globe might have been weakened or ruptured by an injury. An alternative trick is the use of a paper clip fashioned into a rounded retractor by bending over a key or bandage scissors (Fig. 1). This may be cleaned with alcohol and dried and then, while the head

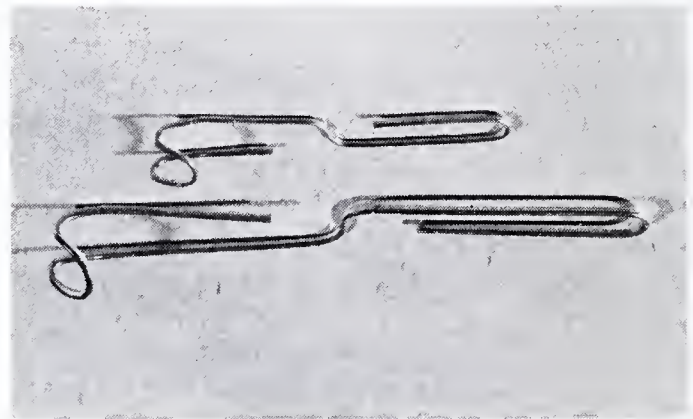


Figure 1.
Ordinary paper clips fashioned into effective eyelid retractors for use with the patient's head well immobilized.



Figure 2.
Paper clip retractor in use.

gfs

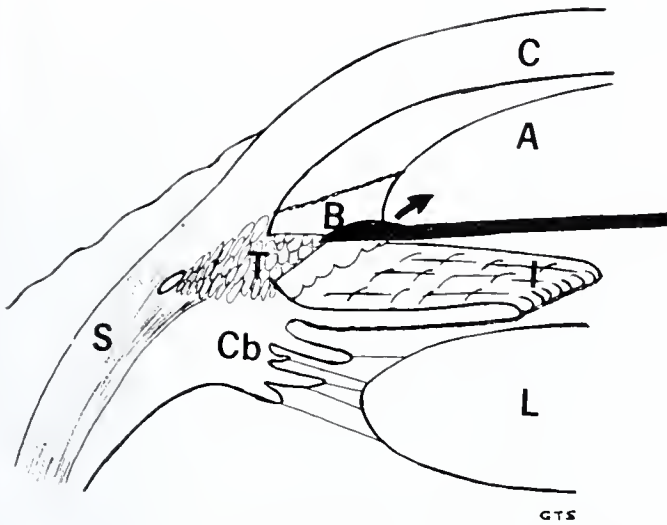


Figure 3.

The needle-knife is seen cutting through the hypothetical Barkan's membrane (B) and the layers of trabecular meshwork (T) closest to the anterior chamber (A). Deep to the area of incision is Schlemm's canal. Also shown are the cornea (C), sclera (S), iris (I), ciliary body (Cb), and lens (L).

is stabilized carefully to prevent jerking, the clip may be introduced under the upper lid margin and the eye can be fully examined with oblique and direct illumination. An additional clip may be required for the lower lid. Topical anesthetic drops may make this procedure a little less uncomfortable for the patient.

Pathophysiology

The basic problem in congenital glaucoma is a congenital abnormality of the angle of cleavage between the base of the iris and the peripheral cornea. In more severely malformed eyes this may be seen grossly as an adherence of the peripheral iris to the cornea, but in the majority of cases the irido-corneal angle appears normal and the anterior chamber is of normal or greater than normal depth. By direct observation of the chamber angle with a gonioscopy lens many ophthalmologists feel that an impermeable "glassy" membrane is present overlying the filtering meshwork. Surgery (goniotomy) is aimed at cutting this membrane under direct observation with a small knife. When the procedure is technically satisfactory it is successful in effecting a control of the intraocular pressure in a high percentage of cases. If unsuccessful it may be repeated one to three times with many of the initial failures being cured.

Topical glaucoma medications such as those used for adult glaucoma are of considerable less usefulness in the congenital type. Carbonic anhydrase inhibitors such as acetazolamide (Diamox®) used in adults to decrease aqueous production are of some usefulness but cannot supplant surgery because of toxicity inherent in long-term usage.

The ophthalmologist's complete evaluation of a child with suspected congenital glaucoma will include assessment of the estimated visual acuity in each eye, an approximation of the corneal size (horizontal corneal diameter averages 10 mm at birth and 12 mm at two years, nearly equal to the adult average of 12.5 mm), and evaluation of optic nerve cup/disc ratio. Intraocular pressure measurements and gonioscopy for visualization of the corneo-scleral angle in small children requires general anesthesia. Complete exam under anesthesia can be followed by immediate goniotomy if indicated. If in doubt as to the cause of any severe inflammation of the eye, urgent ophthalmological consultation is indicated. Any abnormality of the cornea other than a simple abrasion demands immediate ophthalmological consultation.

Summary

The clinical picture of congenital glaucoma, an important cause of blindness, is described, with emphasis on the symptomatology of photophobia and inflammation, and comments on further evaluation and treatment are offered. A high level of suspicion in photophobia and early referral are stressed. Differential diagnosis and a suggested examination aid to allow visualization of the eye are presented.

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The Mini Medical Center

Donald Fisher, M.D.*

For many years we have been establishing and increasing the size of our medical centers. They have become a part of many universities and most large cities. The medical center has provided staff and equipment to research and treat many of our medical problems. However, it has several disadvantages, some of which are of special interest to smaller cities and rural areas. In the medical center the cost of hospitalization is high. Patients outside of the immediate area must be transported, often a significant distance. More important they are separated from family and supporting environment. Specialized medical and paramedical personnel become localized to the cities in which centers are located. Funds for development and expansion frequently are directed to the center. Certainly, there are many advantages which justify the continued support of the medical center. However, improvement and better utilization of facilities and personnel requires a more detailed look at the problems.

Hospitalization is generally more costly in medical centers. Many patients are sent to medical centers because they cannot be evaluated or treated adequately locally. This may be due to equipment or personnel. Often, the illness does not require full utilization of medical center facilities, but more than what is available locally.

The patient who is sent to a medical center 100 miles from his home frequently finds himself in a foreign and frightening environment. Fam-

ily and friends may not be available, or may be placed under additional stress and expense. Family physicians are unable to maintain continued contact with their patients.

Medical and para-medical specialists tend to remain in the cities where optimum facilities are available. There is a need for specialists in rural areas. Few areas can offer the specialist the advantages of the medical center. Hence, there is very little incentive to go elsewhere.

Governmental, foundation, and gift support is usually to the medical center. Often, competition for funds is keen. This competition makes it difficult for other hospitals to obtain adequate funds for development.

Every local hospital cannot become a medical center. However, certain critically located hospitals can be developed to the mini medical center level. Such centers could take much of the pressure off the major medical center in the same way that the junior and state college has taken pressure off the universities. Medical and para-medical specialists will find such centers more inviting. Particular research can be undertaken, possibly, in conjunction with major centers. The mini center should be developed with the thought of providing a service beyond that of the local hospital but less than that of the major center. It can also assist the medical school in the clinical teaching of students. The idea of the mini medical center has significant potential. It should be studied in detail, and where feasible, pilot programs initiated.

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Surgery For Vertigo**

Michael E. Glasscock, III, M.D.*

Vertigo of inner ear origin can usually be controlled by conservative medical management; however, there are cases that are refractory and become candidates for some type of surgical procedure. Depending upon the nature of the vertigo and the amount of residual hearing, there are several operative procedures being used today. The purpose of this paper is to make a general review of the diagnostic evaluation of a patient with vertigo and to describe the various surgical techniques that are currently in vogue.

The Evaluation of the Dizzy Patient

A patient complaining of dizziness or unsteadiness should have a thorough neuro-otologic evaluation to determine the cause of his symptoms. This should include a careful history, head and neck examination, screening neurological of the cranial nerves, vestibular tests, audiometric studies and x-rays of the temporal bone.

In dealing with the "vertiginous" or "dizzy" patient the most helpful part of the evaluation is the history. Many of the "dizzy" syndromes that one deals with produce rather typical symptoms.

The head and neck examination should be a basic ear, nose and throat exam incorporating a neurologic evaluation of the cranial nerves.

There are many ways to determine the status of the peripheral vestibular system but the most practical one is the ice water caloric. This can be a large quantity test (5-10cc) or a minimal caloric (0.2cc). The advantage of the minimal test is that there is less chance of making the patient dizzy and nauseated. To perform the test 0.2cc of ice water is placed in the ear canal for 20 seconds and the head is placed at a 60° angle with the floor. Sixteen diopter lenses are placed over the patient's eyes to reduce visual fixation and to enlarge the eye movements for the examiner. There should be an immediate nystagmus with the quick component of the opposite side. When there is an absent response the test is repeated with 0.4cc and then 0.8cc of ice water. No response at 0.8cc is considered an absent response and is a significant finding.

A more sophisticated evaluation can be performed using an electronystagmograph tracing of the response. The ENG has the advantage of recording spontaneous and positional nystagmus. It also provides a record of the test for the patient's permanent file.

Audiometric studies are essential to the evaluation of the vertiginous patient. The basic test battery should include pure tone air and bone with speech discrimination scores. A unilateral sensorineural loss requires further screening with a tone decay test, SISI and Bekesy tracings.

Radiographic studies of the temporal bone with special interest in the internal auditory canal are the next step in the evaluation of the neuro-otologic patient. These should be high quality films made on a special head unit such as the Franklin or Compere. The routine series consists of a Stenvers, Owen, Towns and Trans-orbital-Schuler views.

Depending upon the history and the results of the studies just outlined, it may be necessary to obtain a posterior fossa myelogram. This will determine the presence of a cerebellopontine angle tumor.

Occasionally all facets of the evaluation will be negative, requiring further investigation into possible metabolic or allergic causes for the vertigo.

Surgical Procedures and Their Indications

Once the neuro-otologic evaluation has been completed and a diagnosis established, who is considered a surgical candidate? This, of course, depends upon whether the symptoms are on the basis of peripheral vestibular disease and whether the offending ear can be determined. Another prime consideration is whether the patient has been successfully controlled on a conservative medical regime.

The surgical procedure of choice depends upon the patient's diagnosis and whether he has residual hearing in the involved ear.

The most common peripheral vestibular diseases can be categorized as follows:

1. Meniere's Disease
2. Traumatic Injuries to Labyrinth
 - a) Head injuries
 - b) Iatrogenic

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3. "Vascular" Accidents of the Ear
4. Severe Positional Vertigo
5. Labyrinthine Fistula

The discussion will be limited to those procedures used by the author in everyday otologic practice.

Endolymphatic Subarachnoid Shunt: This procedure is used exclusively in Meniere's Disease. The primary indications are extreme pressure and tinnitus in the involved ear associated with uncontrolled episodic vertigo. It is the most conservative of all operative procedures for endolymphatic hydrops. Pure tones should be at least 50dB with speech of 70% or better. If the hearing is still fluctuating there is a greater chance that the hearing will be improved after surgery.¹

To perform the procedure a simple mastoidectomy is done and the three semicircular canals are outlined. The facial nerve and lateral sinus are identified and the posterior fossa dural plate is thinned down until the dura is exposed. A blue line is found on the posterior semicircular canal. Using the intersection of the lateral and posterior semicircular canals as a guide, an imaginary line is extended back on to the posterior fossa dura where the endolymphatic sac will be found lying between its layers. The top edge of the sac is opened and an incision is made in the posterior wall. A House shunt tube is then placed through the posterior wall into the subarachnoid space. A piece of abdominal fat is removed and placed into the mastoid cavity to prevent a cerebrospinal fluid leak.

Results of the endolymphatic subarachnoid shunt over a long period of time are 60% control of vertigo, 35% lessening or absence of tinnitus and 50% control of pressure. Hearing is stabilized in 75%, improved in 15% and made worse in 10%. It must be remembered that these cases were medical failures or they would not have been surgical candidates.

Labyrinthectomy: Of all the procedures available for the surgical treatment of vertigo, the labyrinthectomy is by far the most reliable and gives the best results. The indications are for any peripheral vestibular disorder in which the hearing is not worth saving. Another indication would be a traumatic labyrinthitis in which the hearing was lost or in a vascular accident to the ear resulting in severe hearing loss and vertigo or unsteadiness.

There are two basic approaches that can be used: the transcanal route and the transmastoid.

Transcanal Approach: This procedure works very well in Meniere's cases but is not as successful in other conditions. The middle ear is entered by making an incision in the ear canal skin and elevating the eardrum. This exposes the middle ear and the stapes. After the stapes has been removed, the utricle and saccule are retrieved from the vestibule by hooks and suction. As much of the neuro-epithelium of the inner ear is removed as possible. The eardrum is then replaced.

The Transmastoid Labyrinthectomy: While it is extremely easy to ablate vestibular function in the Meniere's ear, it is sometimes very difficult to accomplish in an ear that simply has an irritative lesion. In those cases in which the difficulty arises from a fracture through the labyrinth or a vascular accident, the best chance for success is to completely and thoroughly remove all the neuro-epithelium of the semicircular canals and vestibule.

The best procedure for this is the transmastoid labyrinthectomy. This is accomplished by performing a simple mastoidectomy and opening the three semicircular canals. The crista of all three canals are then removed. The vestibule is opened and the saccule and utricle are extracted. This is the most thorough and complete labyrinthectomy that can be performed.

Depending upon the amount of residual function in the labyrinth, the patient may be extremely dizzy and nauseated for 3-4 days. Recovery, after the initial shock of surgery, is steady improvement almost daily. There is usually a complete remission of the episodic vertigo. It takes a few months for compensation to take place. Most patients have some unsteadiness from time to time, but by and large can carry out most of their daily activities. The hearing, of course, is totally destroyed. Tinnitus, when present, may be lessened in intensity but seldom goes away completely.

Vestibular Nerve Section: This procedure is effective for a peripheral vestibular disturbance in which the hearing is still useful. It is particularly helpful in Meniere's patients who have good hearing but have failed to respond to the endolymphatic subarachnoid shunt procedure. Traumatic labyrinthitis with good hearing is another good indication as is severe positional

vertigo. The occasional stapedectomy patient who has a good hearing result but is persistently dizzy is likewise an excellent candidate.

Middle Fossa Approach: This procedure is accomplished by making a craniotomy in the squamous portion of the temporal bone. A House-Urban self retaining retractor is used to elevate the temporal lobe and the greater superficial petrosal nerve is followed to the geniculate ganglion. The facial nerve is used as a guide to the internal auditory canal where the superior and inferior vestibular nerves are avulsed with a right angle hook. A piece of temporalis muscle is placed over the open internal auditory canal to prevent cerebrospinal fluid leak and the bone flap is replaced.

Depending upon the amount of residual vestibular function, the patient can expect the same recovery period as for a labyrinthectomy. For all practical purposes, a total vestibular nerve section accomplishes a labyrinthectomy without destroying the hearing.

Discussion

When one reviews the literature for the treatment of vertigo (medical and surgical) it soon becomes obvious that there are many methods for handling the problem. Some physicians feel all dizzy patients can be managed medically, while others state categorically that there is no satisfactory medical treatment. This much confusion among the specialists in this field is bound to leave the general physician somewhat bewildered.

As in any controversy, there are valid points on both sides of the question. In the first place, many "dizzy patients" never receive an adequate evaluation. Treating a symptom complex and not the underlying cause of any condition is seldom satisfactory. This point cannot be overemphasized. The patient with symptoms of dizziness or unsteadiness must receive a thorough neuro-otologic evaluation. Once the diagnosis is made, then a more intelligent approach to treatment can be carried out.

Certainly medical management has its place in the control of vertigo of peripheral origin. Many patients can lead normal and productive lives with an occasional lightheaded or mild vertiginous attack. Medical therapy usually consists of labyrinthine sedatives. In Meniere's disease the addition of a diuretic is often helpful. In my own experience, vertigo of true peripheral

origin responds well to a combination of two drugs, Valium and Pro-Banthine.

What of the patient who is refractory to medical therapy? How does one decide when to perform surgery?

Once the diagnosis has been established and the offending ear identified, the surgical procedure is chosen. If the hearing is not serviceable in the ear (80dB or worse with poor discrimination) then a labyrinthectomy will produce the best and most consistent relief of symptoms. This is true regardless of the etiology as long as there is peripheral disease.

In surgery of Meniere's disease, when there is serviceable hearing, there are two procedures employed in my practice. My own preference for these procedures depends upon the patient's symptom complex. If the hearing is still fluctuating considerably and returns to normal at times and if the patient complains of extreme pressure in the ear associated with severe episodic attacks of vertigo, my first choice is the endolymphatic shunt. The patient must understand that the success rate of this procedure is only a little better than 60%. He must likewise understand that another procedure may ultimately be necessary to control his symptoms. If the patient is not able to accept these odds, then a vestibular nerve section is recommended.

Other peripheral problems such as positional vertigo, traumatic labyrinthitis, etc. (with good hearing) are considered good candidates for the middle fossa vestibular nerve section.

Difference in technique put aside, most otologic surgeons feel that the dizzy patient (refractory to medical management) will respond to some type of surgical intervention.

Summary

The purpose of this paper has been to emphasize the need for a thorough evaluation of the dizzy patient and to describe some of the surgical techniques employed by the author in his own practice.

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The Physician Shortage: Some Solutions

Donald Fisher, M.D.*

The United States has suffered from a shortage of physicians for many years. The problem is appreciated by both the general population and physicians alike. It seems incredible that such a problem should exist, and even more so, that it should remain unsolved for so long.

The problem can be solved, and it can be solved totally within the next decade if adequate action is taken soon. The purpose of this article is to make recommendations which, if implemented, can provide the public with an adequate number of physicians, who will be as well trained as their predecessors. The proposals are listed in major and minor categories, and according to the ease with which they can be effected. The recommendations are realistic and practical. They could be followed singly or in combination.

First major recommendation: Classes at the majority of medical schools can be increased by fifty to one hundred percent. This increase can begin with the next entering class. The idea that physicians can be taught and trained only in new buildings, using the very latest equipment, and in small classes is absurd. Crowding can exist without significantly affecting the student and his ability to learn medicine. Pre-clinical subjects can be taught in the simplest or basest of settings. Clinical facilities, both private and governmental, which have not been used previously are available. Clinical training through preceptorships can be increased. The use of present facilities can be increased or intensified.

Second major recommendation: The Federal government has the ability to create and operate a medical school. Federal medical schools exist in many countries. The National Institutes of Health have extensive clinical facilities. Financially, the Federal government has been assisting private and state medical schools for years. Commitments could be made by such students, if subsidized during their education, to repay such subsidy through fulfillment of a period of military service. The physician draft might then be unnecessary.

Third major recommendation: The present medical school structure is capable of drastic modification. The medical school, as such, could cease to exist. Basic medicine could be taught at the university level, as in many professions. The student obtains his Bachelors degree in medicine. Subsequently, he obtains his clinical training in a hospital course consisting of a one year junior internship and a one year senior internship. Specialty training could then be obtained in the usual manner.

First minor recommendation: American citizens, who are graduates of foreign medical schools can be admitted to United States hospitals for training immediately after graduation from medical school. The examination given by the Educational Council for foreign medical graduates need not be given United States citizens. Individual competence can be assessed by the training facility. Qualification for licensure can become more flexible.

Second minor recommendation: The financial burden for medical education can be borne, to a much greater extent, by the student. More realistic fees can be charged, especially by state schools. However, a means of obtaining adequate loans for students who can not arrange them through their families must be provided. The Federal government has been active in this field for many years. State governments can, also, assume the role of lender or guarantor.

Third minor recommendation: Professional advice through consultants outside of the medical field may provide information and data regarding the best or most feasible solution for a particular state.

The above recommendations present a positive and workable approach to the solution of the physician shortage. They are ideas which must be developed then implemented. The cooperation of various groups is necessary. The interest of all those concerned with the provision of better health services is essential. Primary responsibility can still be assumed by the medical profession if its action is immediate and drastic.

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The Neoplastic Problem And Its Solution

Donald Fisher, M.D.*

The world's major medical problem is cancer. The statistics of its devastation are well known. For many years, countries have been engaged in speculation, analysis, and laboratory investigation. Some progress has been made. However, at the present time there is no known cure for neoplastic disease, nor does one appear to be close at hand.

The technological achievements of the United States during the past fifty years have been tremendous. The examples are numerous. On occasion, they have resulted from individual effort, but more often they have been the results of cooperative efforts on the part of science and industry. On multiple occasions successful achievement has been made possible or expedited by financial assistance from the Federal government.

The two most outstanding examples of apparently impossible tasks realized through the cooperation of science, industry, and government are the creation of the atomic bomb, and the lunar landings. Each project presented overwhelming problems. Both required extensive planning and integration. The complete resource banks of the scientific and industrial communities were made available and committed to the project goals. The financing of both projects was underwritten by the Federal government without significant limitation. The success of the atomic and lunar projects were, in all probability, due to the total commitment of the requisite scientific, industrial, and financial resources.

The Federal government, in addition to financing, acted as coordinator. The projects were, in fact, jig saw puzzles. The puzzle parts were allocated to specialists in thought and pro-

duction. The problems of each part were researched, developed, and proven. Obviously, some parts were more difficult than others. Eventually, all parts were properly fashioned and fitted. The result was the successful utilization of atomic energy and the lunar landings.

The United States has proved its ability to solve problems. Still, many major problems confront us. The relative importance of our problems is, itself, a major problem. Society makes many demands on government. Government, also, makes demands on the people and the country's resources. The needs of the people are of legitimate and primary concern to our government. At times, the importance of particular problems are not totally appreciated by the government. At times it is not possible to allocate the necessary resources toward the resolution of a specific problem. Eventually, major problems must be dealt with. Their delay can no longer be justified or tolerated. Such is our present position with regard to investigation and solution of the extremely important problem of cancer.

Cancer is with us today and will continue to be so until its solution is approached on a total commitment basis. We cannot wait for individual countries, scientists, or companies. The Federal government must, immediately, undertake the coordination and financing of this project. The technological force of the United States, through its scientific and industrial communities, has the capacity to solve the neoplastic phenomena. It will do so when the Federal government realizes that further delay cannot be justified or tolerated. Its administrative and financial resources can be committed now. There is no justification for delay.

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Office Orthopaedics

Exercise!!!

Kenneth G. Jones, M.D.*

It really isn't enough to tell the patient to go home, lose weight and exercise, no matter what end the physician has in mind — unless, perhaps, he wants to rid himself of an uncooperative patient. If we as physicians don't have an integrated concept of what it is we wish to accomplish through exercise and what physiological processes will be involved by expenditure of the required energy, we will be unable to give the patient the necessary instructions. Also, we will be unable to motivate the patient to follow our recommendations.

All physicians are aware of the value of active exercises to increase the range of motion of recently immobilized and stiffened joints and to strengthen weak muscles. Special exercises, such as Codman's for the shoulder, Williams' for the low back, and quadriceps for the knee are routinely prescribed. But these are exercises for limited regions of the patient's anatomy. What we wish to consider here is total body exercise, as a consequence of which we hope to increase the patient's stamina, agility, improve the general body metabolic processes (such as elimination and weight reduction), increase his gusto for life, lessen the ennui of aging, and prolong both his active and his total life. If these goals can be achieved, it behooves the physician, both for personal and professional reasons, to be aware of these attainable benefits and to know how they may be acquired beginning at any age.

Most of us can recall that when in undergraduate school, we were often commanded by the coach during practice sessions to run around the field a great number of times. Those healthy participants, who could stay with it, attained a level of physical fitness adequate for the season.

In the case of the well-motivated athlete, this simple approach was adequate, but those less-motivated often dropped out along the way. Though most physicians can remember receiving such empirical commands by various athletic directors, few are fortunate enough to recall any instruction given, during his formal medical education, that acquainted him with the benefits of "total body exercise" and the physiology on which that activity rests. As a rule, for years, this void has been transmitted unaltered, to the young physician who, in turn, has passed it on without significant embellishment to his patients. The patient, like the young athlete, is often told: "lose weight, do push-ups, and run". Seldom has he been given a sound program of total body exercises and motivated to live that program. Fortunately, we now have available the means of correcting this inadequacy.

Doctors and their patients want good health! When acquainted with the means of acquiring and retaining it, some will be willing to pay the required price. And one thing is certain; to acquire anything of value, we must pay a price. We are now able to advise the patient intelligently what to do, how often to do it, how long to do it, and for what purpose. The price to the patient is, for the most part, measured in effort.

Dr. Kenneth Cooper, who is knowledgeable in physiology as well as medicine, and who has documented the response to exercise of more than 5,000 subjects, is both qualified and able to explain fitness in a manner easily understood by laymen as well as physicians. He has made it clear that the physical fitness with which we are concerned here is . . . "endurance fitness, or working capacity, the ability to do prolonged work without undue fatigue . . . and it has little to do with pure muscular strength or agility. It has very much to do with the body's *overall* health, the health of the heart, the lungs, the

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entire cardiovascular system and the other organs, *as well as* the muscles. And the key to the whole thing is oxygen . . . the fuel is food and the flame is oxygen."

Since we are able to store food, but unable to store oxygen the problem of increasing body endurance is a matter of delivering oxygen to the cells in an increasing amount so they might utilize the fuel available. If those components which constitute the delivery system for oxygen, lungs, heart, and vessels, are weak or inefficient, significant activity will readily result in the energy demands surpassing the body's capacity to produce it.

Simply stated, the spread between the minimum bodily requirements for energy and the maximum ability of the organism to produce energy on demand (activity) is a measure of the fitness of the individual. "The most physically fit have the greatest spread; the least fit, the lowest spread. In some, the minimum and maximum are almost identical." Exhaustion comes first to those with the least reserve (spread between minimum requirements and maximum capacity). The reserve capacity can only be increased by conditioning the lungs, heart, and other systems which have to do with the energy process. " . . . it's the improvement of these systems toward which all exercise should be directed."

The response of the body to a graduated increasing demand has been designated by Dr. Cooper as the "training effect" which is the goal of endurance exercises. It consists of an increase in vital capacity and tidal air, increased passage of air across the alveolar membrane, increased stroke volume, a lowering of the resting pulse, an increased collateral circulation, an increased elasticity of the vessels, a greater total blood volume, increased muscle tone, alteration in body configuration resulting from fat loss and an increase in muscle mass, all of which result in an increase in maximal oxygen utilization by the cells producing a greater total energy output for the organism. The aspirant's self-image is often enhanced and his outlook on life may be altered. In short, he feels better. We all know the brain is readily responsive to both a deficiency of oxygen and an increased supply.

Muscular fitness derived from isometrics and

isotonic activities have a place in development or rehabilitation of specific muscle masses, but they contribute little to "endurance fitness" which is the goal. As observed, fitness of the organism is dependent on the body's ability to produce energy beyond the minimal required on demand, and this, in turn, is dependent on the availability of oxygen to the tissue cells, so " . . . your maximum oxygen consumption is the best measure of your fitness".

"Each exercise requires a certain amount of energy, consequently a certain amount of oxygen. This oxygen requirement can be measured, and this is the basis for the (Dr. Cooper's) point system. Each exercise is assigned a certain number of points, based on the amount of oxygen required to perform it."

Dr. Cooper has constructed an ingenious point system which permits the participant to alternate his activities as frequently as he desires. Each exercise has been assigned a relative value and points are earned on the basis of the time required, by the subject, to perform a measured amount of that exercise. The object being to reduce by repetition the time required to perform the starting amount of exercise and to increase the amount of exercise he can do in a given time span. Running, swimming, cycling, handball, basketball, and squash are considered the best of the aerobic exercises. The participant's total points for the week are expected to equal or to exceed the points required to progress to or to sustain the level of fitness desired. For the first time, to my knowledge, we have available a definable fitness goal and a flexible, graduated system for reaching that goal. Fortunately, we can begin at any age and at almost any level of fitness. Moreover, his "twelve minute test", which consists of determining how much distance the candidate can cover on foot in twelve minutes, permits him to determine his present state of fitness and to measure improvement as his body responds to his efforts.

Dr. Cooper has put "physical fitness" within the reach of most. As observed, the price is *effort*, which regrettably will be too high a price for some.

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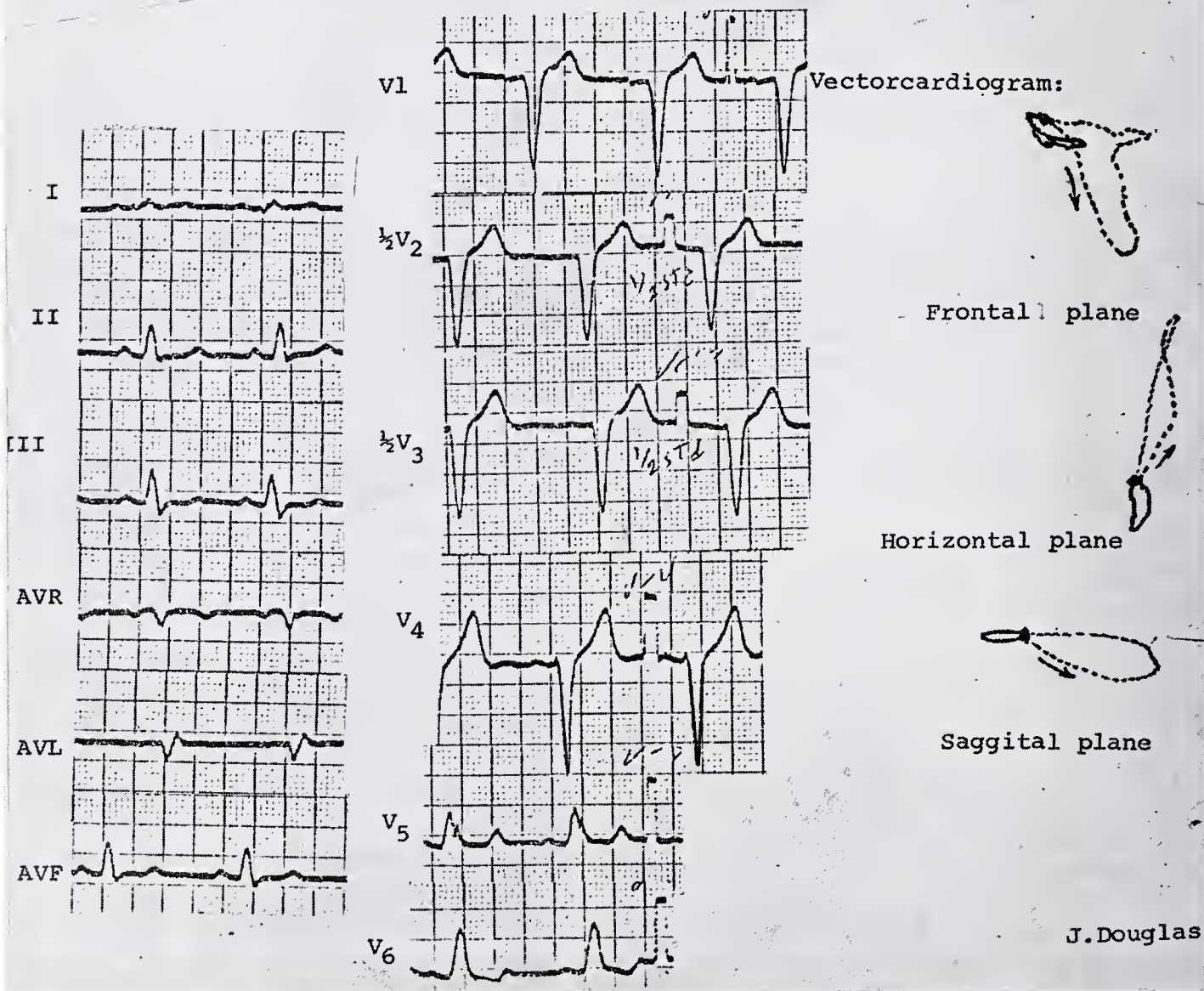


OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 310)

38 yr old white male; 67 inch tall; 145 #, BP 124/78
asymptomatic



John E. Douglas, M.D., Assistant Professor of Medicine
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The Implementation of Laboratory Improvement and Evaluation in the State of Arkansas

Robert T. Howell, Dr. P.H.*

The Arkansas Laboratory Improvement Project, a Health Services Project Grant 311 (c), No. 74004, under P.L. 89-749 was proposed to implement a system for the improvement of clinical, independent and hospital laboratory services throughout the State. This improvement was to be accomplished through the establishment of a proficiency testing program encouraging laboratories to effect suitable quality control programs within the laboratory; the offering of training, including short-term review courses, seminars and bench training; and the provision of consultative services to laboratories requesting them or demonstrating a need for them by unsatisfactory performance on the proficiency test samples. Centralization of the program into a statewide program was thought desirable to allow participating laboratories to compare their work with peer laboratories and encourage cooperation between laboratories and laboratory groups to provide a more effective range of services.

The timing of the grant approval was opportune in that it coincided with an atmosphere of self-examination and awareness of deficiencies among laboratory scientists, brought on by serious criticisms found in the scientific and lay press, and the heavy involvement of the Federal government in medical care through Social Security and the Clinical Laboratory Improvement Act of 1967. The Arkansas Laboratory Improvement Project was funded on June 1, 1969 and an expanded proficiency testing program was begun in October of the same year when the present director of the Division of Public Health

Laboratories, Arkansas Department of Health, officially was named project director. The project dates from June 1969 to May 1972.

Early during the first budget period the Arkansas Laboratory Improvement Project worked toward implementation of:

1. Establishing performance and resource base-lines for participating laboratories.
2. Establishing and maintaining a workable, effective proficiency testing program.
3. Establishing an evaluation system which would measure the ongoing effectiveness of the L.I.P. and measure the extent to which each laboratory was upgraded while participating in the project.
4. Developing a training and consultation program which would be responsive to the needs as evidenced by the evaluation system with special emphasis on internal quality control systems.
5. Developing community support, cooperation and endorsement of this project.
6. Recruiting, training and assigning project employees.
7. Procuring of equipment and supplies.

The Arkansas Laboratory Improvement Project owed much of its original form and substance to the Arkansas Premarital Syphilis Serology Approval Program established under Act 120 of 1953, which has served to certify 126 laboratories throughout Arkansas, and the Voluntary Interstate Proficiency Testing Program of the Center for Disease Control (U. S. Public Health Service) in Atlanta, Georgia. Records maintained in the Divisions of Public Health Laboratories

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and Hospitals and Nursing Homes, Department of Health, suggested that there were approximately 160 clinic, hospital and independent laboratories within the state serving a population of approximately 1,923,000 people. Survey questionnaires and application forms were sent to all known laboratories. Initially, 84 laboratories responded to the questionnaire with 82 signing up for one or more parts of the program, exclusive of those laboratories doing only syphilis serology. While the number of laboratories participating has varied over the past three years, a fair number stayed with the program the entire time. At one time as many as 135 laboratories were participating.

From its beginning, the project was fortunate to have the support of the Center for Disease Control, Atlanta, Georgia; the University of Arkansas Medical Center, Little Rock; the Veteran's Hospital, Little Rock and numerous other laboratories, pathologists, physicians and laboratory scientists who assisted with advice, supplies, reagents, literature, critical review and other assistance and served as reference/referee laboratories to the Proficiency Testing Program.

The Proficiency Testing Program was designed after the Premarital Syphilis Serology Program of the Division of Public Health Laboratories, Arkansas Department of Health and the Center for Disease Control's interstate program. It was determined initially to offer test samples in the areas of Clinical Chemistry, Hematology, (including immunohematology), Serology (syphilis and non-syphilis) and Microbiology (including bacteriology, parasitology, mycology, and mycobacteriology) and to allow each laboratory to determine which samples it wished to receive.

As the results of the participating laboratories were returned, they were tabulated and graded against the results obtained from the Reference/Referee Laboratories. A backup system using the results of ten "peer" laboratories — laboratories within Arkansas, selected for accuracy of work, laboratories of different types, different locations over the state and a range of sizes. The Peer Laboratory results were used in grading when Reference/Referee Laboratory results were unsatisfactory for grading, as sometimes happened, or when one or more Referee Laboratories did not complete the work.

Summary of Percentage of Satisfactory Grades

SAMPLE CONSTITUENTS	FY 1970	FY 1971	FY 1972
CLINICAL CHEMISTRY			
Blood Urea Nitrogen	69	80	94
Uric Acid	75	91	93
Creatinine	—	88	94
Total Protein	96	88	98
Cholesterol	100	90	96
Glucose	87	84	96
Calcium	100	76	90
Sodium	—	79	94
Potassium	—	89	97
Chlorides	—	73	96
HEMATOLOGY/ IMMUNOHEMATOLOGY			
ABO Typing	100	99	99
Rh Grouping	93	99	99
Hemoglobin	99	88	90
Hematocrit	98	92	96
RBC	97	94	94
Differential	63	—	—
Atypical Antibody	—	86	21
MICROBIOLOGY			
Bacteriology	51	68	60
Mycobacteriology	—	—	93
Mycology	77	80	77
Parasitology	24	75	70
SEROLOGY			
Syphilis	93	96	98
Non-syphilis	Not Graded		

Development of a training program and a system for provision of consultation was felt to be needed to enable laboratories to improve on their performance and to broaden their scope in terms of laboratory services provided. Three methods selected to implement this were provisions of short training courses in laboratory subject, bench training in the laboratories of the Health Department and individual consultation. The most popular method was the provision of short, one to five days, training courses. The first year we were able to offer only one such course, but this was increased to three and five in the second and third budget period. The Center for Disease Control provided teaching assistance for most of these courses. There have been a few additional courses given based on the originals developed by the Center for Disease Control and we hope more will be offered in the future.

Requests for short term training courses mostly centered around Microbiological subjects, especially Enteric Bacteriology, Parasitology and General Bacteriology. Several laboratories expressed a need for courses in instrumentation. Our chief concern now is finding funds to continue this program.

The division has offered assistance to clinical laboratory personnel by means of bench training for many years, but an effort to expand this program was made with limited success. We feel that this is the cheapest, fastest and most direct means of providing training (on a one for one basis) and we expect to keep encouraging applications for and acceptance of this type of training.

Consultation probably was the least accepted training method. We never had enough sufficiently trained personnel, particularly in clinical chemistry and hematology, to be able to put them on the road to visit, inspect and work with individuals or laboratories as needed. Some limited consultation was provided but it often was confined to the telephone or letters.

Staffing proved to be one of the greatest problems of the project. Aside from low salaries there were not enough qualified people to fill the positions. Any success we were able to obtain on the project was due to the section chiefs and regular staff of the State Health Laboratory giving it their full support and enthusiasm. This was far beyond the required State's portion of grant support. Support from the CDC, the University of Arkansas Medical Center and others helped the project and allowed us to overcome, for the most part, the shortage of grant personnel. Some personnel were obtained on a contract basis.

Although this Laboratory Improvement Project was a five-year project with diminishing Federal support over the five-year period, the grant funds were greatly reduced during the second budget period and cut short at the end of the second budget period. However, we were able to continue into a third budget period with remaining grant funds. This had considerable impact upon the extent of the program during the second and third years, and limited our plans to expand our proficiency testing programs by the development of large specimen

pools, especially in serology, clinical chemistry and parasitology and planned a program using photo-micrographs, and hopes to refine and improve the logistics of specimen delivery. The evaluation system was to be improved by some use of automation, use of cost evaluation and an improvement in consultative services. We particularly wanted to develop and distribute a newsletter to all laboratories informing them of the prevalence of communicable diseases, new laboratory procedures and the availability of satisfactory reagents.

During the second budget period, and continuing into the third, the proficiency testing program was expanded and improved. The number of participating laboratories was increased to its highest level, the number of specimen shipments, number of samples per shipment, and the number of types of tests offered were also increased. Improvements were made in grading systems used with the different types of samples and in reporting of results to participants. And, as we gained experience, better quality specimens were prepared.

We were able to build up serum pools for both serology and clinical chemistry with improvement in filtration techniques and with use of preservatives plus use of beef blood, human donor serum and outdated blood bank blood and we learned to adjust the chemical or serological constituents with reasonable success. By extracting animal specimens, from dogs, cattle and horses, we made pools of parasitology samples, also tried using aqueous standard solutions in clinical chemistry—to which most of the laboratories strenuously objected.

A big disappointment to the staff during this period was our failure to expand consultative and inspection work, although a portion of the latter was being done by the Division of Hospitals and Nursing Homes, and failure to develop a laboratory newsletter. The newsletter was needed to strengthen the ties between the State Public Health Laboratory and the many clinical laboratories, bringing them needed information on techniques, reagents, and communicable disease prevalence, plus building up our support as a Reference Laboratory for their use.

Although the Federal grant monies for this project were to terminate at the end of the second budget period, approval was obtained to spend any unspent grant funds during FY 1972 to carry on the project until such time as other sources of funds could be developed. Unfortunately, no one, except those most closely involved, took the premature cut-off of funds seriously in time to present a budget to the State Legislature and the Legislature was not sympathetic that year to expanded budgets. The Regional Medical Program was informally approached for continuing funds but could offer no encouragement on this although they subsequently funded one similar project and one related project in the private sector.

However, with the remaining grant funds and the continuation of the two grant salaries by the Health Department, the project was able to continue with our emphasis being on the proficiency testing portion. This we were able to continue at about the same level as the year before.

Toward the end of FY 1972 and early FY 1973, it was resolved to keep the project going if at all possible until the legislature met in early 1973. With the assistance of the State Health Officer, the Division of Hospitals and Nursing Homes and with support of the Arkansas Hospital Association, the Medical Technology Societies and the Society of Clinical Pathologists, it was decided to ask for a one-time only donation from the participating laboratories based on the kind and size of laboratory, to get us through the period until the project could be fully State funded. Laboratories responded with a total donation of \$8,800. This included 86 hospital laboratories, 14 clinic laboratories and 6 independent laboratories. Some laboratories took this opportunity to discontinue proficiency testing entirely while others signed up for the basic or several comprehensive programs of the College of American Pathologist's Evaluation Program. All of the preceding promised support in

the legislature to totally fund the State program, the result of such support being the State Legislature's approval of a modest program for clinical laboratory improvement funded at approximately \$45,000 per annum, not too much less than what we had averaged, minus equipment, over the past four years.

The Arkansas Laboratory Improvement Project, funded under Title 314 (e) started in late 1969 with big plans and hopes which were soon scaled down by the practicalities of scarce State and Federal funds, the short supply of well qualified technical personnel and the complexity of the problems. However, it came at a time when pressures from Medicare, Social Security and the professional and lay press had created a climate for such change and the acceptance of proficiency testing programs and professional training was gratifying.

Without the grant funds to get the project going and the help of the Public Health Service in training and guidance, the implementation of such a statewide program in Arkansas would still be years away. The success of the program can be measured by the numbers of clinical laboratories accepting proficiency testing as external quality control and from their results adopting more stringent internal quality control procedures and by their acceptance of training as it becomes available by requesting training in other areas.

Many technical societies have greatly increased training programs in their annual meetings and in special workshops. The results can be seen in the improvement of the laboratories on their test samples and by the numbers of laboratories dropping certain procedures because of demonstrated inadequacies. The program's success also can be measured by the support of the many affected groups in keeping the program going by donations during the low budget periods and by supporting our legislative requests for budgeting for laboratory improvement.





EDITORIAL

Cirrhosis and Nutrition

Alfred Kahn, Jr., M.D.

Disorders of the liver occupy a large share of the medical literature because of the increasing number of "tools" available to study biochemical functions.

Rothschild, Oratz, Zimmon, Schrieber, Weiner, and Canechem reported on "Albumen Synthesis In Cirrhotic Subjects With Ascites Studied With Carbonate — ^{14}C " (*Journal of Clinical Investigation*, Vol. 48, p. 344, Feb. 1969). They studied nineteen cirrhotic patients to determine if the low blood albumen seen in cirrhosis of the liver was due to a decreased manufacture of albumen by the diseased liver or if the low blood albumen represented dilution or maldistribution of albumen. Previous reports in *The Journal of Clinical Investigation* have shown that in some cirrhotics given albumen the patients worsened, for example, esophageal varices ruptured. These nineteen patients all had ascites and an adequate diet; seventeen patients had esophageal varices. The studies resulted in a division of the patients into three groups by evaluating them by the milligrams of albumen per kilo of body weight manufactured per day: Group I 42 mg. per kilo per day to 105 mg. per kilo per day, Group II 136 mg. per kilo per day to 167 mg. per kilo per day, and Group III 203 mg. per kilo per day to 378 mg. per kilo per day. It was interesting that these investigators found no relationship between the amount of albumen produced per day and the level of serum albumen; the serum albumen level in Group I varied from 1.5 gram% to 2.3 gram% and in Group III it varied from 1.4 gram% to 3.0 gram%. The blood globulin was raised in both groups. The plasma volumes were elevated in seventeen of nineteen patients. The authors

commented that "the patients with the lowest level of albumen production also had the lowest level of cholesterol esters, the highest SGOT level, and a trend toward the more prolonged prothrombin times." It was felt that alcohol immediately prior to administration may have had some adverse effect on the albumen production as did temporary fasting.

An extension of the effects of nutrition on albumen metabolism can be found in an article by James and Hay: "Albumen Metabolism: Effect Of The Nutritional State and The Dietary Protein Intake" (*Journal of Clinical Investigation*, Vol. 47, p. 1958, Sept. 1968). Eighteen children were studied: nine malnourished and nine children recovered from malnutrition; radioactive tagged albumen was used. The authors confirmed previous work in this area, namely, that in humans who are malnourished, there is a decreased catabolism of albumen; and, it is of special interest that this is true regardless of whether the individual is on a high or low protein diet. Thus, the nutritional status seems to determine albumen destruction. The time limits on this are interesting. James and Hay showed that a malnourished child required two to three weeks of high protein feeding before albumen catabolism became normal and children who had recovered from malnutrition reverted to low albumen catabolism in seven days after being fed a low protein diet. The synthesis of albumen by malnourished patients was definitely low, particularly on a low protein diet. They stressed three things in the adaptation to a low protein diet "(a) low synthetic and catabolic rates of albumen; (b) a reduced extra vascular albumen mass; (c) a capacity for a rapid

return to normal in the synthetic rate when the dietary protein was increased". The relationship of this to the situation in liver disease is obvious provided one takes into consideration that the James and Hay study was performed on patients who were simply malnourished and not suffering from cirrhosis.

The malnutrition of cirrhosis has been suspected of causing the cardiopathy often seen in liver disease. The medical literature has recently suggested in dog studies that alcohol might have a direct toxic effect on the heart rather than having its effect mediated through malnutrition. Regan, Levinson, Oldewurtel, Frank, Weisse, and Moschos have studied "Ventricular Function in Non-cardiacs With Alcoholic Fatty Liver: Role of Ethanol In The Production of Cardiomyopathy" (Journal of Clinical Investigation, Vol. 48, p. 397, Feb. 1969). Regan, et. al. felt that the relationship between alcohol and cardiomyopathy could be tested by using alcoholics without evidence of heart disease or malnutrition; the test bed, so to speak, was left ventricular function. They studied forty-two patients, who were divided into six groups. Their results in patients with alcoholism with fatty livers revealed that an angiotensin infusion produced an enddiastolic pressure in the left ventricle definitely greater than that in controls; the blood pressure rise in the aorta was about the same in both groups. Regan, et. al. used another criteria of ventricular function, namely, the contractility index which showed the speed of increase in the ventricular pressure rise at various pressures to ventricular muscle fiber length; for normals, they report the index to have been 1.27 and in patients with fatty livers it was 0.87. When alcohol was ingested by the chronic alcoholic, the ventricular filling pressure increased with an actual decline in stroke output; this required a moderately large dose of ethanol before the change occurred. The patients were checked for evidences of myocardial injury after ethanol ingestion by measuring transaminase, potassium, and phosphate in the blood sampled from the coronary sinus. The individuals on low doses of alcohol had virtually no change, but, if moderately large doses of alcohol were administered, definite evidences of myocardial injury were detected by these chemical methods. The authors conclude "that

the cumulative effects of repeated ingestion of ethanol in intoxicating doses can produce diminished left ventricular function before clinical evidence of cardiac abnormality or heart disease not necessarily related to malnutrition".



RESOLUTIONS



WHEREAS, the recent death of our colleague, Dr. C. Fletcher Watson, is noted with sincere sorrow, and

WHEREAS, Dr. Watson had been an esteemed and respected member of the Pulaski County Medical Society for thirty-seven years, and

WHEREAS, Dr. Watson's contribution to the well being of the community has been immeasurable, as has his contribution to organized medicine;

BE IT THEREFORE RESOLVED:

THAT, this resolution be made a part of the permanent records of this Society, and

THAT, a copy of this resolution be forwarded to Dr. Watson's family as an expression of sincere sympathy; and

THAT, a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Henry Hollenberg, M.D.
Robert Watson, M.D.

Approved:
Executive Committee
December 19, 1973

M E D I C I N E I N T H E



THE MONTH IN WASHINGTON

Two more major national health insurance proposals have been thrown into the Congressional hopper, bringing the total to eight with at least two more waiting in the wings, including that of the Administration.

Chairman Harley O. Staggers (D-W.Va.) of the House Commerce Committee has introduced his own national health insurance proposal (NHI), saying hearings will be held on his bill in the coming year.

The second new NHI proposal came from Senate Republican leader Hugh Scott (R-Pa.) and Charles Percy (R-Ill.).

Staggers' National Comprehensive Health Benefits Act of 1973 would provide comprehensive health care benefits and complete protection against the costs of catastrophic illness to all. It would be financed by a combination of contributions from employers, the federal government and individuals, scaled to income. The federal funds are for health insurance and catastrophic illness benefits for the poor and near-poor.

The introduction came shortly before hearings on NHI by the Commerce Subcommittee on Public Health and Environment.

It is the first major NHI proposal to be referred to the Interstate and Foreign Commerce Committee rather than the Committee on Ways and Means, Staggers noted, adding that it is the first NHI proposal by a chairman of a major committee in the House.

Major features of the proposal, as described by Staggers:

- a strong role for state governments in the development and administration of the program;
- incentives for the creation and use of Health Maintenance Organizations;
- a six-year transitional period for orderly development;
- the use of existing private health insurance

carriers for administration of the insurance provisions;

- and the fact that the program builds on, rather than federalizing, the existing health care system.

The bill provides that newly created State Health Commissions (SHC's) would be responsible for the actual administration of much of the program, including standard setting and quality control, assisting in the development of Health Maintenance Organizations (HMO's), and administration of some of the insurance provisions. Existing private health insurance carriers would be used to underwrite most of the legislation's insurance benefits. The development and use of HMO's would be encouraged through additional direct developmental assistance and through a ten percent federal subsidy of HMO premiums.

Within two years of enactment all aged, low income and unemployed individuals and families, would be provided coverage for basic health services. Within four years of enactment, all individuals and families would be provided coverage for basic health services and the costs of catastrophic illness. Within seven years of enactment, all individuals and families would be provided coverage for comprehensive health care benefits and the costs of catastrophic illness.

Senator Scott said his two-part "Health Rights Act" would provide for in-patient protection for all persons suffering major illness, and would set up an out-patient health maintenance insurance plan. It would replace both the medicare and medicaid programs now in effect. Scott added that he believed his bill was "must legislation" for this session of Congress "because its goal is to serve every American at a critical time".

Under the Scott-Percy Health Rights Act, both the in-patient and out-patient plans would be administered by insurance carriers or other public or private agencies on a regional basis, under contract with the newly created Office of Health Care within the Department of Health, Education and Welfare.

The in-patient, "major illness" protection differs from traditional catastrophic plans by covering all costs above each family's health cost ceiling, which is determined by a formula taking into account both family income and family size. Money for the plan would be financed in part through the present health insurance portion of Social Security payroll taxes and in part through general revenues.

The out-patient plan would be financed in part through family premium payments which would be supplemented in whole or part with federal payments for low-income families. Employers could arrange to finance all or part of their employees' premiums.

The Act would also establish a two-year, Presidentially appointed "Health Delivery Committee" to study the current and long-range needs for medical personnel and facilities. It would make recommendations to the President and Congress.

* * *

The American Medical Association has asked the Congress to reject proposed legislation that would restrict the Food and Drug Administration's authority over food supplements.

In testimony before the House Commerce Subcommittee on Health and Environment, C. E. Butterworth, Jr., M.D., Chairman of the AMA's Council on Foods and Nutrition, said the FDA's actions "are based upon sound scientific evidence and are clearly in the public interest."

Under new FDA regulations, U. S. government recommended daily allowances (RDA's) have been established that permit the inclusion of 19 essential vitamins and/or minerals in products to be marketed as dietary supplements. The RDA's are based on those formed by the National Academy of Sciences and reflect the most current scientific judgments on the subject, said Dr. Butterworth.

Ingredients with no recognized nutritional value would be excluded from dietary supplements.

"There is no scientifically acceptable evidence to support the use of bioflavonoids, rutin, inositol and other similar ingredients," said the witness. "It is our opinion also that the quantities of vitamins included in mixtures for dietary supplementation should furnish daily an amount which approximately fulfills but does not greatly

exceed the recommended dietary allowances," Dr. Butterworth testified. Inclusion of excessive amounts of fat-soluble vitamins A and D can be harmful, and "is scientifically unwarranted and potentially dangerous," he said.

Dr. Butterworth said: "It clearly would not be in the public interest to enact legislation virtually eliminating the authority of the Secretary (HEW) to control the kinds and amounts of ingredients in the dietary supplements and other foods for dietary use. The current regulations promote safety, and provide full information to consumers about such products, and this information will enable them to make decisions based on scientifically acquired data."

* * *

Legislation liberalizing tax treatment of retirement savings by the self-employed seems to be moving closer to congressional enactment in the next session.

The House Ways and Means Committee has tentatively approved the Senate provision allowing self-employed people such as lawyers, dentists and physicians to claim tax deductions on \$7,500 a year, or 15 percent of income, for sums placed in qualified pension plans. This compares with the previous Keogh limit of \$2,500 or 10 percent of income.

The threat of a strict limitation on pension tax deferments in corporations, including professional service corporations, appears to have diminished. The Ways and Means Committee in general accepted the principle in the Senate bill of a \$75,000 annual limit on retirement benefit plans (so-called defined benefit plans) and on others (defined contribution plans which included profit-sharing, money purchase, etc.) of a retirement benefit not to exceed 100 percent of the high three years of average compensation.

Ways and Means must still take a final vote and also work out with the House Education and Labor Committee an agreement on the form the overall legislation — a sweeping pension reform measure — will take when presented on the House floor. Defeated in Ways and Means was a move by labor, an arch enemy of the Keogh provision, to reduce the tax deferral to a maximum of \$5,000 per year.

* * *

President Nixon is correct in his statement that home temperatures in the mid-60s are, in

some ways, healthier than temperatures in the mid-70s, according to William Barclay, M.D., Assistant Executive Vice President for Scientific Affairs, American Medical Association.

"Heating the interior of homes and offices during the winter removes moisture from the air. The higher the temperature, the dryer the air. Air with little moisture aggravates bronchial and other respiratory problems. It can contribute to dry throat and nose, coughs and dry skin.

"The respiratory system doesn't cope well with the sudden changes in temperature. Moving from an overly warm room into outside cold affects the body adversely, causing coughs and respiratory problems. The body adjusts to temperature changes gradually. We feel the cold more acutely on the first cold day in the fall than in January. We do not adapt well to abrupt temperature changes.

"There are no major health advantages inherent in keeping inside temperatures somewhat lower, but there are minor advantages that add to comfort and well being during the winter."

* * *

President Nixon has signed into law a three-year, \$185 million bill to help set up emergency medical units around the nation.

The bill authorizes grants and contracts for feasibility studies, planning, establishment, operation and expansion of emergency medical systems (EMS) as well as research and training. Rep. Tim Lee Carter, M.D. (R-Ky.) said in House debate it would assist communities throughout the nation to develop and improve their emergency medical services systems and "contribute directly to saving tens of thousands of lives each year."

President Nixon had criticized the bill in a veto earlier this year, contending that existing federal and state programs are adequate to handle the problem. The veto led to a major confrontation with Congress last September in which the Administration won when the House failed by a narrow margin to muster the required two-thirds vote.

The bill increases from 50 percent to 75 percent the federal share of grants for emergency programs and earmarks 20 percent of grants for rural areas.

The Administration's prime objective to the

earlier bill was an amendment ordering that all public health service hospitals be kept open. The EMS law does not contain this provision. However the PHS hospitals were kept alive by a rider to a military appropriations bill that was subsequently signed into law.

* * *

The White House has said that it plans to designate enough radio frequencies for emergency medical service to serve the entire country.

Clay T. Whitehead, director of the White House's Office of Telecommunications Policy, says this will be a vital first step in giving American communities the kind of integrated emergency medical services they need to save thousands of lives a year among persons stricken by heart attacks and strokes or injured in accidents. Many such persons now die because they do not get adequate emergency care before they reach a hospital.

Estimates of the number of lives that could be saved each year if all regions of the country had adequate emergency care systems range from 60,000 to more than 100,000.

Mr. Whitehead noted that a few cities already had efficient systems including two-way communication between ambulance and hospital and radio equipment for sending vital data on the patient's condition from the scene of the emergency to doctors at a hospital. For most American communities, he said, such arrangements are still nothing more than science fiction.

Dr. Charles C. Edwards, Assistant Secretary for Health in the Department of Health, Education and Welfare, said the department was putting a high priority on efforts to develop an efficient emergency medical system throughout the United States. How much of the effort should be Federal and how much locally initiated is under study, he said.

The Administration plan calls for allocating 38 radio frequencies for emergency medical use throughout the United States. Mr. Whitehead said 22 were already available, but on a much less standardized basis. Some of the others are now used by the Department of Defense and other Federal agencies. Still others are used for highway callboxes, ski patrols and the like. A few are not allocated.

* * *

The American Medical Association has

awarded a plaque to David Kindig, M.D., in recognition of his "outstanding and dedicated service in implementing the goals and objectives of the National Health Service Corps (NHSC)".

Dr. Kindig played a key part in launching the NHSC program of sending PHS physicians into physician-shortage areas where help is requested by the local and state medical societies. In receiving the award, the youthful physician said the cooperation of the AMA and of the nation's local and state medical societies has "been unique and made the program a success."

Presenting the award, at a Washington, D. C., lunch Richard Palmer, M.D., vice chairman of the AMA Board of Trustees, said the AMA has been firmly behind the NHSC program. He pointed to the AMA's "project USA" program in which the AMA provides physicians to spell PHS physicians who are on vacation or ill.

Arkansas Designated as Single PSRO Area

The Department of Health, Education and Welfare has announced 182 area designations for PSRO's. Arkansas was designated as one area, which was anticipated and hoped for by the Medical Society.

Applications for appointment as PSRO have yet to be finalized by DHEW but the Arkansas Foundation for Medical Care has received continued reassurances that when they are ready the Foundation will receive the necessary forms. Headquarters is in almost daily contact with several different sources, keeping abreast with developments on PSRO. These include the AMA, our Congressmen and Senators, and the Regional Office for DHEW in Dallas.

The Foundation anticipates being among the first PSRO's being approved in May due to the fact that there has been no controversy in Arkansas over who should receive the appointment.

Physician Workbook Available

The Illinois Council on Continuing Medical Education has recently announced the availability of a unique workbook, "Your Personal Learning Plan". The workbook is designed to lead any physician through step-by-step assessment of his practice by identifying his educational problem areas and objectives. It will also aid in the development of a plan to meet these objectives.

A copy of the workbook may be obtained by individual physicians by writing "Personal Learning Plan" on your prescription blank and mailing it along with \$1.00 to: Illinois Council on Con-

tinuing Medical Education, 360 North Michigan Avenue, Chicago, Illinois 60601.

Dividends Available on Workmen's Compensation Insurance

With so many operating costs reaching new highs these days, you are probably looking for good ways to reduce overhead expense. We recommend that you investigate the dividend program for Workmen's Compensation Insurance approved by the Arkansas Medical Society. Physicians in the program pay standard rates initially as required by law, but get back part of their premium as savings (dividends) depending on claims experience. Pharmacists in a three-state savings class have earned dividends ranging up to 48% under a plan just like this. However, savings in the 20% to 25% range are more often earned.

Success of the program depends on how well policyholders are able to prevent injury accidents. Recommendations from safety experts help participants earn a good record and receive maximum dividends.

The dividend program is underwritten by Casualty Reciprocal Exchange, a member of the Dodson Insurance Group, P. O. Box 559, Kansas City, Missouri 64141, and is not available from other insurance sources.

ANSWER—Electrocardiogram of the Month

Rate = regular sinus at 72/min

PR = 0.15

QRS = 0.14 — abnormally prolonged

QT = 0.46 — abnormally prolonged, but expected when the QRS is so distorted

The initial farce of the QRS complex is abnormal. It goes from right to left and nearly straight back and down

That's the wrong way



It should go from left to right a short distance, anteriorly and horizontally, or even a little up, as shown to the left. Therefore the initial depolarization of the ventricle is abnormal, implying either bundle branch block (BBB), infarction or abnormal ventricular pacemaker site. The terminal QRS vector, though a little more horizontal, is virtually the same as the initial, and is inscribed too slowly — long QRS. Thus this is LBBB (abnormal initial vector, terminal vector to the left and prolonged QRS 0.12-0.16 sec). Because things are so messed up in LBBB, the normal "landmarks" for diagnosing infarctions are scarcely if at all visible. Therefore we can rarely read infarction "patterns" in the face of LBBB. The T vector is straight anterior — i.e. divergent from the QRS — the typical situation in simple BBB.





PERSONAL AND NEWS ITEMS

Speakers Bureau

Dr. John D. Ashley of Newport represented the Arkansas Medical Society's Speakers Bureau January 22nd when he addressed the Kiwanis Club of Newport on the subject "The Heart".

Physician Reappointed by AMA

The Board of Trustees of the American Medical Association has announced the reappointment of Dr. C. C. Long of Ozark to the Council on Rural Health. Dr. Long has served on the Rural Health Council since 1970 and has been reappointed for 1974.

Physicians Assume New Positions

Dr. Donald T. Neblett, pediatrician and member of the staff of the Children's Clinic in Jonesboro for twelve years, has joined the staff of the Pediatric Department of the University of Tennessee Memorial and Research Hospital.

Dr. W. T. Rainwater, a pediatrician who has been practicing in Blytheville, will join the staff at the Children's Clinic in Jonesboro.

Physician Heads College Board

Dr. T. A. Feild, III, has been selected to serve his fifth term as chairman of Board of Trustees of Westark Community College in Fort Smith. Westark is the largest and fastest growing college in the state of Arkansas.

Dr. Feild is in general practice with Dr. Don M. Meador at the Meador-Feild Clinic in Fort Smith.

Physician Opens New Office

Dr. Winston H. Worthington, graduate of the University of Tennessee College of Medicine, has announced the opening of his office for the general practice of medicine in Caraway. Caraway, in Craighead County, has been without a physician for several years.

Physician Joins Clinic Staff

Dr. Joe B. Crumpler, Jr., a general and vascular surgeon, has joined the staff of the Millard-Henry Clinic in Russellville. Dr. Crumpler is a native of Fayetteville.



THINGS



TO COME

Annual Session 1974

Mark the following dates on your calendar for this Spring—April 28th through May 1st—for the Medical Society's Annual Session in Little Rock. Preliminary agenda are in and an outstanding program is in the making.

Dr. Malcolm C. Todd, President-elect of the American Medical Association, will address the House of Delegates the opening day, April 28th. Much of the House agenda will again deal with the controversies surrounding PSRO's.

Seminars are being scheduled focusing on

"Abortion" and on the subject of "Physician's Assistants-Nurse Practitioners in Arkansas". Scientific sessions range from Total Knee Replacement to Problem Oriented Medical Records to Uses of Newer Antibiotics in Pediatric Practice.

A golf tournament is again planned this year. Make plans now to attend and bring your wife, as the Woman's Auxiliary is again planning many activities during the convention.

Postgraduate Course on Peptic Ulcers

The American Gastroenterological Association has announced that a postgraduate course in "Peptic Ulcer Disease" will be held at the San Francisco Hilton Hotel May 19-20, 1974. The course will thoroughly and critically review the physiology, pathophysiology, diagnosis, medical and surgical treatment, and complications of: gastric ulcer, duodenal ulcer, and acute mucosal lesions. This course is directed at practicing and

academic gastroenterologists and gastroenterological surgeons, physicians with an interest in gastroenterology, and residents in gastroenterology or surgery.

Tuition for AGA members will be \$100, for guests \$125, and for qualified residents \$50. Advance registration is required by April 30, 1974. Additional information may be obtained by contacting AGA Postgraduate Course—Peptic Ulcer, 6900 Grove Road, Thorofare, New Jersey 08086. Course Directors will be Jon I. Isenberg, M.D. and James C. Thompson, M.D.

Human Sexuality Symposium Planned

The University of Indiana Institute for Sex Research has announced that its Summer Program in Human Sexuality will be held June 16-27 in Bloomington, Illinois. The registration fee of \$285.00 covers the lecture course, forums on sociosexual issues, sex counseling symposium, and attitude-reassessment program. Registration ends May 17. You may write: Institute for Sex Research—Summer Program, 416 Morrison Hall, Indiana University, Bloomington, Indiana 47401.



OBITUARY

Dr. Franklin Thomas Oates

Dr. Franklin Thomas Oates of Lepanto died December 27, 1973, at the age of 52. Dr. Oates was born December 1, 1921; attended public schools in the Pottsville system; and received his undergraduate training at Arkansas Polytechnic College in Russellville. He received his M.D. degree from the University of Arkansas School of Medicine and served his internship at City-County Hospital in Fort Worth, Texas. Dr. Oates served as a captain in the United States Army Medical Corps.

Dr. Oates was active in community affairs as a member of the Lepanto Chamber of Commerce, Rotary Club, First Baptist Church, Lepanto Industrial Development Corporation, City Council, and member of the Board of Directors of the Lepanto Garment Company.

He was a member of the American Academy of Family Physicians.

Dr. Oates is survived by his wife, Jania, and three daughters.

Dr. Gerald K. Patton

Dr. Gerald K. Patton of Fort Smith died December 31, 1973. Dr. Patton was born in Little Rock on January 23, 1923.

He received his B.S. degree from the University of Arkansas in 1943 and obtained his M.D. degree from the University of Arkansas School

of Medicine in 1946. He interned at Wheeling, West Virginia, and Albuquerque, New Mexico. Dr. Patton was a veteran of World War II, serving as Medical Examiner.

He was a member of the Arkansas Medical Society, Sebastian County Medical Society, American Medical Association, Southern Medical Association, International College of Surgeons, and a diplomate of the American Board of Surgeons.

Dr. Patton is survived by his wife Dorothy, two sons, one daughter, and two step-daughters.

Dr. Thomas Price Foltz

Dr. Thomas P. Foltz of Fort Smith died January 9, 1974, at the age of sixty-five. Born December 1, 1909, Dr. Foltz was a graduate of the Fort Smith Public School System and he did undergraduate work at the University of Missouri. He received his M.D. degree from the Tulane University School of Medicine in New Orleans, Louisiana.

Dr. Foltz practiced in Fort Smith—serving as chief of surgery many years, both at St. Edward Mercy Hospital and Sparks Regional Medical Center. He also served as the chief of staff at Sparks for many years. Dr. Foltz served for 19 years on the Sparks Board of Trustees and also held positions on the Board of Trustees of the Fort Smith School Board and Arkansas Blue Cross-Blue Shield.

A member and past president of the Sebastian County Medical Society, Dr. Foltz was a member of the Arkansas Medical Society, the American Medical Association and a Fellow of the American College of Surgeons. He was a Navy veteran of World War II.

Dr. Foltz is survived by his wife, Eleanor, and two sons.

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THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

March, 1974

Vol. 70 No. 10

FORT SMITH, ARKANSAS

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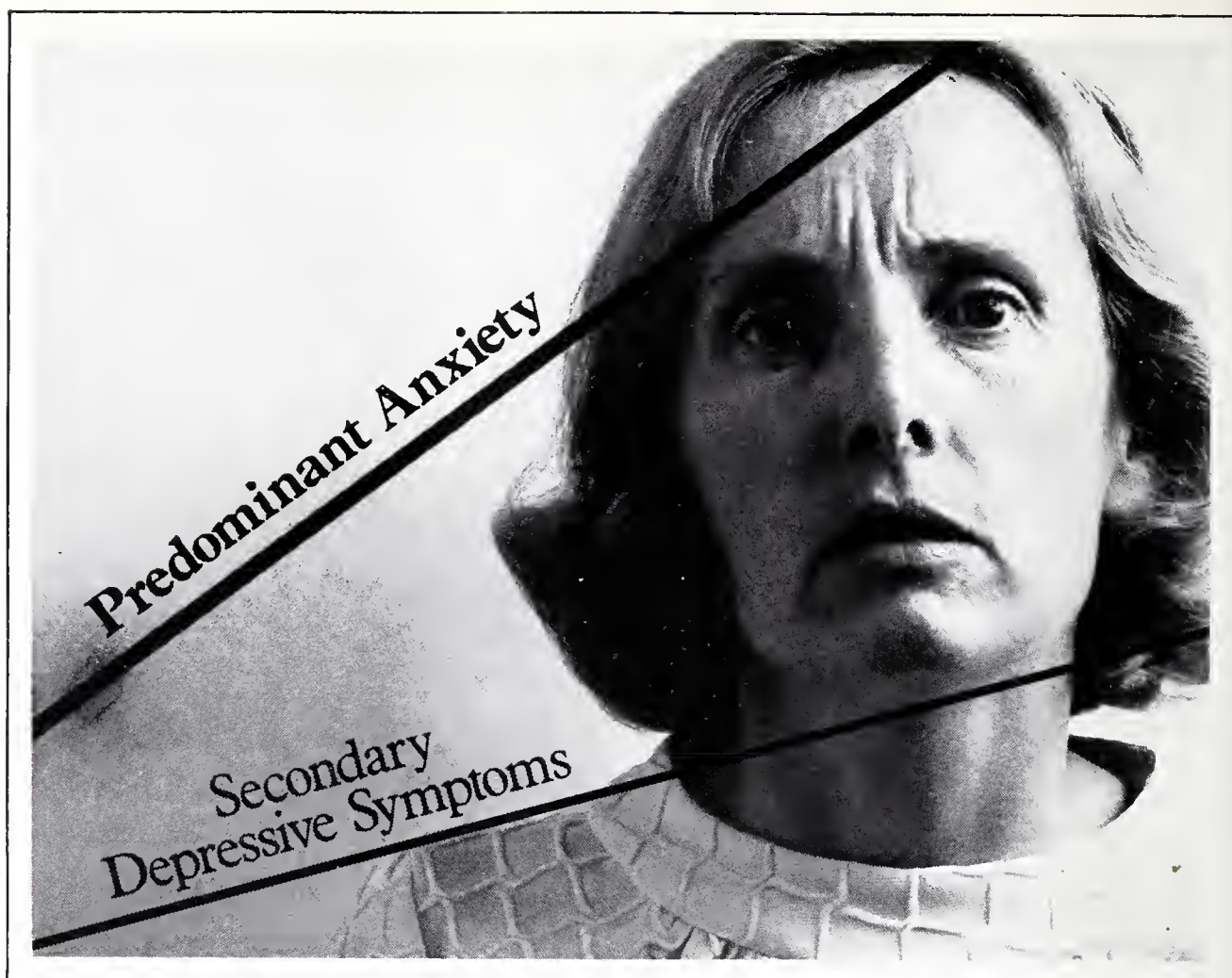
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medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

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NEWS—Our readers are requested to send in items of news, also marked copies of newspapers containing matter of interest to the membership.

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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 10. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

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Emergency Room Care in a Community Hospital without House Staff

Larkin M. Wilson, M.D., F.A.C.P.*

INTRODUCTION

During recent years it has become apparent that the demand for emergency room out-patient care has substantially increased. Indeed, studies by Jacobs, et al, estimated a 100% increase in emergency department visits throughout Rochester, New York, from 1960 to 1970. (1) Several studies from metropolitan hospitals have enumerated the prevalent problems, such as over-use of the emergency facilities for non-urgent medical treatment, disproportionate use of the emergency room by lower socioeconomic groups, substitution of care by an emergency room for that of a primary practicing physician, and inadequate and inefficient emergency room treatment. (1) (2) Nearly all of the studies concerning these problems were done in hospitals where a house staff was primarily responsible for the emergency care.

Emergency room service patterns obviously differ according to hospital size, the local community, and characteristics of the patients served in the area. It is the purpose of this investigation to report the pattern of emergency care provided by a small community hospital without a house staff in El Dorado, Arkansas. Physicians responsible for emergency services at this hospital are local private doctors comprising the medical staff. The emergency room is manned by a voluntary on-call roster of this medical staff for those patients arriving without the services of a personal physician. Four rotational call lists are maintained consisting of General Surgery, Pediatrics, Obstetrics, and Internal Medicine. One thousand consecutive cases treated at the hospital emergency room were studied and the characteristics of the patients and their care were determined. Data concerning those who were treated by their personal physicians are compared

with data from those who were treated by the appropriate on-call doctor. Also, this study attempts to provide evidence whether the increasing use of the emergency room is due only to an increase in demand by patients or whether, perhaps, referrals from the medical staff of the hospital are responsible for part of the mounting burden.

METHOD

The study was conducted in a prospective manner by obtaining information on each patient coming to the emergency room of Union Memorial Hospital, El Dorado, Arkansas, from August 12, 1972 through September 30, 1972. During this 50-day period, 1,000 consecutive cases were studied. Data were obtained concerning the patient's age, sex, race, residence, and whether the patient had medical health insurance. The hour of arrival was noted and the source of referral was determined. The duration and type of the presenting complaint were recorded. Patients were treated either by their personal physician or by an on-call physician and it was noted whether the patient was treated by telephone instructions to the nurse in charge or whether he was actually seen by the physician. The lapse time between arrival and disposition of the patient was recorded, and whether the patient was admitted or held for observation was noted. The data from those cases treated by the on-call physician were compared to the data from those cases treated by their personal doctor.

Union Memorial Hospital is a general hospital with 106 beds and is one of two general hospitals serving the city population of 25,000 people. It also serves the surrounding communities in Union County (Arkansas), having a population of 40,000, and it is a referral center for out-of-county patients in adjacent areas. The emergency room is staffed by a registered nurse

*714 West Faulkner, El Dorado, Arkansas 71730. Chief of Staff, 1972, Union Memorial Hospital, El Dorado, Arkansas.

supervisor, graduate practical nurses, and nurse's aides 24 hours a day. The medical staff consists of 43 local private practitioners.

RESULTS

One thousand consecutive emergency room cases were seen in a period of 50 days, yielding an average of 20 cases per day. Of these, 256 (25.6%) were treated by an on-call physician and the remaining 74.4% were treated by their personal physician. Of the 256 cases treated by the on-call physician, 29.3% were treated by the doctor on surgical call; 24.6% by the pediatrician on call; 43.4% by the medical call doctor; and only 2.7% were treated by an obstetrician.

Table I presents data regarding age groups. It will be noted that the ages of patients treated by the on-call physician tend to be more in the younger groups as compared to those treated by their personal physician.

TABLE I
AGE GROUPS OF 1000
EMERGENCY ROOM CASES

Age Group	All 1000 Cases	Rx by On-Call M.D.	Rx by Personal M.D.
1-10 Years	17.1%	24.2%	15.0%
11-19 Years	17.2%	19.1%	16.5%
20-29 Years	16.4%	17.6%	16.0%
30-39 Years	11.7%	12.1%	11.6%
40-49 Years	11.4%	8.6%	12.4%
50-59 Years	9.9%	8.6%	10.3%
60-69 Years	10.0%	5.9%	11.4%
Over 69-years	6.0%	3.9%	6.7%

Table II presents an analysis by sex and it is noted that there is a higher prevalence of males in the group treated by the on-call physician. The percentage of non-white patients in the entire group is 25.1%, and this is similar to that of the surrounding community. The percentage of non-whites in the group treated by the on-call physician is greater than those treated by their personal physician. As would be expected, more out-of-county patients were treated by the on-call physicians. Approximately 81% of all cases had some type of third party insurance coverage, but there was a higher percentage in the group treated by the personal physician. Seventy-three percent of all cases seen in the emergency room were referred by a local physician and only 22.5% were self-referred. A significant figure is the 66% of patients treated by

the on-call physician who were referred by local doctors.

TABLE II
SEX, RACE, RESIDENCE, MEDICAL INSURANCE,
AND SOURCE OF REFERRAL IN 1000
EMERGENCY ROOM CASES

	All 1000 Cases	Rx by On-Call M.D.	Rx by Personal M.D.
Sex			
Male	48.9%	56.3%	46.4%
Female	51.1%	43.7%	53.6%
Race			
White	74.9%	68.4%	77.2%
Non-Whites	25.1%	31.6%	22.8%
Residence			
Union County	86.7%	77.7%	89.8%
Out of County	13.3%	22.3%	10.2%
Medical Ins.	81.5%	75.0%	83.7%
Source of Referral			
Local M.D.	73.0%	66.0%	75.4%
Self	22.5%	28.5%	20.4%
Other	*4.5%	5.5%	4.2%

*Includes out-of-county M.D.

Table III presents data in regard to the nature and duration of the medical problem. Trauma was the presenting problem in 50.4% of those cases treated by the on-call physician and in only 33.5% of those treated by their personal physician. The duration of the complaint was only 12 hours or less in over half of the cases. Approximately 63% of those patients treated by the on-call physician had symptoms less than 12 hours, and only 48.1% treated by their personal physician had symptoms for this shorter period of time.

TABLE III
DURATION AND TYPE OF PRESENTING
PROBLEM IN 1000 EMERGENCY ROOM CASES

	All 1000 Cases	Rx by On-Call M.D.	Rx by Personal M.D.
Presenting Problem			
Trauma	37.8%	50.4%	33.5%
Symptom	62.2%	49.6%	66.5%
Duration of Complaint			
Under 12 Hrs.	51.9%	62.9%	48.1%
12-24 Hours	2.7%	3.1%	2.6%
1-5 Days	31.8%	28.5%	32.9%
Over 5 Days	13.6%	5.5%	16.4%

Table IV details treatment factors. Approximately 63% of the patients treated by their personal physician were seen by the doctor, whereas only 42.2% of those treated by the on-call physi-

TABLE IV
TREATMENT DATA OF 1000
EMERGENCY ROOM CASES

	All 1000 Cases	Rx by On- Call M.D.	Rx by Per- sonal M.D.
How Treated			
Seen By M.D.	57.5%	42.2%	62.8%
Phone Orders			
Only	42.5%	57.8%	37.2%
Held For			
Observation	7.6%	8.2%	7.4%
Admitted To			
Hospital	15.3%	16.0%	15.0%
Duration In E.R.			
0-30 Minutes	58.1%	59.0%	57.8%
1 Hour	23.7%	21.5%	24.5%
1½ Hours	9.9%	14.0%	8.5%
2 Hours	3.8%	2.3%	4.3%
2½ Hours	2.2%	1.2%	2.5%
3 Hours	1.1%	1.6%	0.9%
Over 3 Hours	1.2%	0.4%	1.5%

cian were actually seen. Seven to eight percent of the patients were held for observation, and 15 to 16% were admitted to the hospital. These figures are similar for both the group treated by the on-call physician and those treated by their personal physician. Over half of the cases were discharged from the emergency room within 30 minutes, and at least 80% were discharged within one hour. Disposition of 98.8% of the cases was made by three hours. There was very little difference in the time the patient remained in the emergency room between the group treated by the on-call physician and the time of those treated by their personal physician.

Table V shows the percentage of the entire 1,000 cases arriving at various three-hour time

TABLE V
HOUR OF ARRIVAL OF 1000
EMERGENCY ROOM CASES

Time of Day	Percent of Patients
12- 3 a.m.	5.9%
3- 6 a.m.	3.3%
6- 9 a.m.	14.2%
9-12 p.m.	18.4%
12- 3 p.m.	10.9%
3- 6 p.m.	18.7%
6- 9 p.m.	20.2%
9-12 a.m.	8.4%

periods during the day. From 6 p.m. to 9 p.m. the greatest case load was seen (20.2%). Between 9 a.m. and 12 p.m. and between 3 p.m. and 6 p.m. approximately 18% were seen during each interval. The periods with the least number of cases were those between 9 p.m. and 6 a.m.

Fifty-eight patients who were treated by the on-call physician came to the emergency room by self-referral. Of this group, 65.5% had health insurance coverage and 31% were over the age of 40.

COMMENT

In a medical community served only by private physicians, one would logically expect the patient population coming to an emergency room to have been under previous care of a personal doctor. In the study by White and O'Connor, 86% of the cases reporting to a community hospital emergency room claimed to have a private physician. (3) In the present study, approximately 75% were treated by their personal physician. However, 25% required treatment by an on-call physician. It is significant that two-thirds of this latter group were referred to the emergency room by a physician in the community. A plausible explanation might be that the patient inquiring of a local physician was referred to the emergency room because the presenting problem was considered outside of the physician's specialty or because he was unavailable. These data would support the conclusion that most patients treated by the on-call physician did not come to the emergency room without having first made contact with a physician. White and O'Connor found that 36% of the emergency room cases who reported having a private physician had attempted to contact their physician prior to coming to the emergency room, and 73.6% of these had talked with their physician. (3) These data are in contrast to studies from larger urban areas where over three-fourths of the emergency room cases were reported to be self-referred without having called a local physician prior to arrival. (1) The present study would seem to indicate that a significant factor in the increasing emergency room demand is a result of physician referrals.

Fifty-eight self-referral patients were treated by the on-call physician. This group might well represent those patients in the geographical area who do not feel they have a personal physician

and must seek attention in a community facility. It is interesting to note that 65.5% of this group were of socioeconomic means sufficient to possess medical insurance and about one-third were over the age of 40. One might judge from this that a large group in the community who are able to afford medical care and who are in an age group where preventive medical advice would be indicated, but who have not been in a relationship with a physician to the extent that they consider a particular doctor their personal physician. It is this group that might benefit from improved public education concerning the advisability of having made prior arrangements for medical care.

The results indicate that trauma was the major presenting problem in only about 37.8% of the cases. This figure is in agreement with studies from smaller community hospitals but is somewhat less than those reported from urban area emergency rooms. (1, 3)

In general, the patients treated by the on-call physician were younger, consisted of more non-whites, had a higher percentage of males, had symptoms for a shorter period of time, and 75% possessed health insurance. This is contrasted to those treated by their personal physician who were older, more prevalently white, and tended to have symptoms for a longer period of time, with 83% having medical insurance coverage.

A source of concern might be the finding that treatment of 58% of the patients by the on-call physician was accomplished by telephone orders to the nurse in charge. These cases were found to represent minor medical problems and thought not to require the presence of a physician on an emergency basis. This finding is corroborated by other studies, and in one urban community only 35% of the cases coming to the emergency room were classified as needing care in an emergency department. (1)

Approximately the same percentage of cases were admitted to the hospital from the emergency room whether treated by the on-call physician or the personal physician. Thus, both groups were equally ill in respect to admission for hospital treatment. Other studies from community hospitals have also reported approximately 15% of emergency room cases being admitted to the hospital. (3)

It is encouraging that over 80% of all patients were discharged by one hour and, in over half,

disposition was made by 30 minutes. It would seem difficult to improve on the apparent efficiency that these figures indicate. The major hours of emergency room demand were during the work day period with the exception of a peak load between 6 and 9 p.m. in the evening. Only 17.6% of the entire emergency room case load was between the hours of 10 p.m. and 6 a.m. This finding is in agreement with other studies. (1)

It appears from the data that medical responsibility of the emergency room in a small community hospital without a house staff can operate well by the use of a voluntary on-call system composed of physicians from the private medical staff. In this study, over two-thirds of patients treated by the on-call physician were referred by local physicians, and the great majority of these patients had symptoms less than 24 hours but were thought to need the presence of a physician for treatment only about 57% of the time. Approximately 15% of all patients were ill enough to require admission to the hospital, and the efficiency of the emergency room service is reflected in the fact that disposition was made in 80% of the cases by the end of the first hour after arrival.

SUMMARY

One thousand consecutive cases presenting to the emergency room at a small community hospital without a house staff were studied. One-fourth of the patients were treated by a voluntary on-call physician from the private medical staff. The majority of the patients were treated for non-traumatic conditions and over 80% of all cases possessed health insurance coverage. The patients treated by an on-call physician were referred by doctors in the community 66% of the time and this group had a higher prevalence of youth, non-whites, and males. The duration of symptoms in this group prior to arrival was shorter than in those treated by their personal physician and 58% only necessitated treatment by phone orders to the nurse in charge. Approximately 15% of all cases seen were admitted to the hospital and disposition was made in 80% by the end of one hour under this system.

ACKNOWLEDGMENT

Appreciation is expressed to the Medical Records Department and Emergency Room personnel of Union Memorial Hospital for their help in collecting the data for this study.

Management of Postmenopausal and Senile Osteoporosis**

B. Lawrence Riggs, M.D.*

Postmenopausal or senile osteoporosis is common in middle-aged and older persons of either sex but occurs more often and is more severe in women. Forms of the disease similar roentgenographically, but probably different in regard to therapy and etiology, occur in young adults and in children. The pathologic abnormality in osteoporosis is an absolute decrease in the amount of bone present, to a level below that which is capable of maintaining the structural integrity of the skeleton or, as Albright, et al.,¹ succinctly put it, "too little bone" (Fig. 1). The bone which remains is normal by ordinary histologic examination. The loss is proportionately greater in areas of the skeleton containing large amounts of trabecular bone and which are subject to prime load-bearing; this accounts for the presenting features of the disease—crush fractures of the vertebrae, fractures of the neck of the femur, and fractures of the distal end of the radius and ulna. With respect to bone turnover, postmenopausal and senile osteoporosis are characterized by increased bone resorption and normal bone formation.²

The etiology of these common forms of osteoporosis is undoubtedly complex and not well understood. Figure 2 illustrates in diagrammatic form some of the factors that appear to be important in etiology. First, age-related bone loss

is an almost universal occurrence. It begins, in both sexes, in middle life and continues as age increases.³ Second, the amount of bone present prior to bone loss influences the amount present in older life. It has been appreciated for some time that osteoporosis is most common in white women and is least common in black men; it is now known that the maximal bone density achieved in young adult life is least in white women and greatest in black men and is intermediate in white men and black women.³ Also, within the same race and sex, there may be hereditary variation in the maximal bone density that is achieved during young adult life. Third, in women, loss of estrogens at the menopause accelerates bone loss.⁴ There is now evidence that estrogen opposes the effect of endogenous parathyroid hormone on bone and that estrogen deficiency results in an increase in bone resorp-

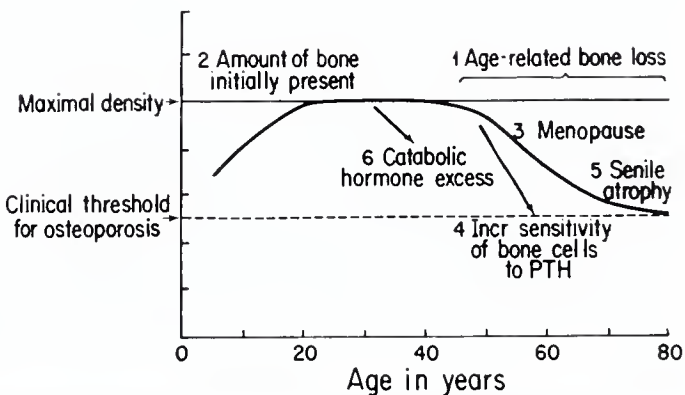


Fig. 2. Factors implicated in pathogenesis of osteoporosis. Trabecular bone mass is plotted on ordinate and age on abscissa. Note that maximal bone mass is achieved in young adult life and that after the fourth decade there is a progressive decrease which is influenced by several factors. See text for details.

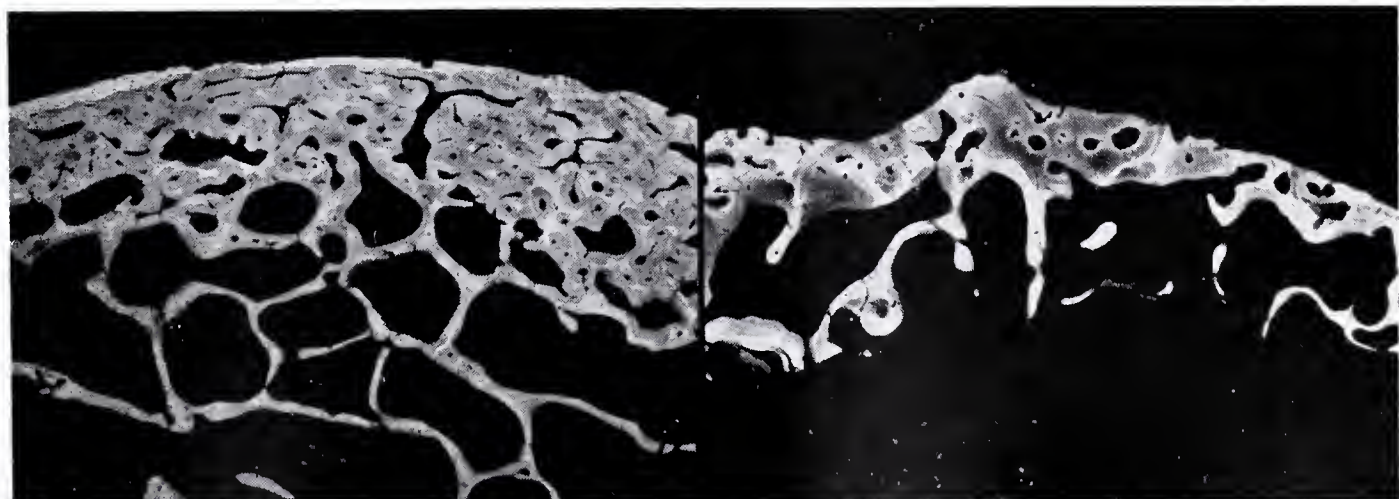


Fig. 1. Microradiographs (x15) of bone from femoral neck in normal (Left) and osteoporotic (Right) persons. Note that in osteoporosis there has been a high loss of trabecular bone and also a significant thinning of the cortical bone. (From Jowsey, J., Riggs, B. L., Kelly, P. J.: New Concepts in the Treatment of Osteoporosis. Postgrad Med, 52:62-67, 1972. By permission of McGraw-Hill, Inc.)

tion.⁵ Fourth, some additional factor must be present to explain the greater postmenopausal bone loss in osteoporotic than in nonosteoporotic women. This additional factor may be an increased responsiveness of bone to endogenous parathyroid hormone when estrogen is deficient. Fifth, in older patients with osteoporosis, impaired bone cell function due to senescent changes may have a dominant role. Sixth, in perhaps 20% of patients with primary osteoporosis, there is an increase in serum immunoreactive parathyroid hormone as a consequence of either normocalcemic primary hyperparathyroidism or secondary hyperparathyroidism due to inadequate calcium absorption in the intestinal tract.⁶

Diagnosis

Treatment of involutional osteoporosis should never be undertaken until diseases known to produce or simulate osteoporosis (Table 1) have been reasonably excluded. An adequate evaluation consists of a thorough history, a careful physical examination, roentgenograms of the thoracic and lumbar parts of the spinal column, analysis of the serum for calcium, phosphorus,

and alkaline phosphatase, protein electrophoresis, and quantitative determination of urinary calcium and fecal fat excretions. Additional studies such as hormonal determinations and bone marrow aspiration are performed when indicated. My colleagues and I have encountered the greatest diagnostic difficulty in patients with preexisting osteoporosis who exhibit vertebral collapse due to metastatic carcinoma. The observation that multiple compression fractures are rarely due to carcinoma is a differential point of some value. Occasionally, it is necessary to perform open biopsy of the involved vertebrae to exclude malignancy.

Evaluation should also include a record of the number and date of attacks of acute back pain (because such episodes are due to vertebral compression), careful measurement of height and an estimate of former height, comparison (when possible) of current and previous spinal roentgenograms, and, since an extremely low calcium intake may accelerate bone loss, an estimate of habitual calcium consumption. (An approximation is possible on the basis that most dietary calcium comes from dairy products. A quart of milk contains 1,200 mg and an average slice of American cheese contains 320 mg. An intake of 800 mg or more of calcium daily is probably satisfactory.) An estimation of the severity of the bone loss can be obtained by using the proximal femoral trabecular index as described by Singh, et al.⁷ However, there is a need for developing more accurate methods of assessing trabecular bone mass in the axial skeleton.

General Treatment

The most common symptom of osteoporosis is acute, sharp, back pain. The pain arises from a recent crush fracture of a vertebra and should be treated by support of the spinal column. This usually can be accomplished by an orthopedic brace or corset, although occasionally bed rest is required. Analgesics should be used liberally, and physical therapy in the form of heat and gentle massage to the back may be helpful. As the fracture heals, the acute pain usually will subside over a period of a few weeks with no other form of treatment. Many patients with osteoporosis experience a chronic aching in the spinal column due to abnormal stress, from previous vertebral compressions, on the spinal

TABLE 1.

CAUSES OF GENERALIZED OSTEOPOROSIS

Primary osteoporosis

1. Postmenopausal and senile osteoporosis
2. Idiopathic osteoporosis of young adults
3. Acute juvenile osteoporosis

Secondary osteoporosis

1. Hormonal
 - a. Hypogonadism
 - b. Cushing's syndrome
 - c. Hyperthyroidism
 - d. Hyperparathyroidism
2. Nutritional
 - a. Severe malnutrition
 - b. Scurvy
 - c. Malabsorption
3. Diseases of connective tissue
 - a. Osteogenesis imperfecta
 - b. Ehlers-Danlos syndrome
 - c. Homocystinuria
 - d. Rheumatoid arthritis and related diseases
4. Diseases of bone marrow
 - a. Multiple myeloma and related diseases
 - b. Diffuse metastatic carcinoma
5. Paralysis and total immobilization

muscles and ligaments. This pain is often relieved by the use of an orthopedic supporting garment. There is little reason to fear that the partial immobilization from use of this garment will lead to exaggerated loss of bone tissue, since weight-bearing should be sufficient to stimulate normal bone formation. However, chronic back pain in osteoporosis can often be relieved more physiologically by using hypertension exercises to strengthen flabby paraspinal muscles. A diet containing at least two glasses of whole or skim milk is recommended. A small daily supplement (1,000 units) of vitamin D is also prescribed.

The importance of protecting the spinal column by avoiding heavy lifting and situations that might result in accidental falls cannot be overemphasized.

Drug Therapy

Largely because of the development of more sensitive techniques of measurement, in recent years there has been an increase in our understanding of the relative effectiveness and mechanism of action of different therapeutic programs (Fig. 3).

Estrogens.—Estrogenic hormones have been used in osteoporosis for more than 30 years. The rationale for their use was the belief that the disease was due to loss of sex hormones at the menopause. Although it seems unlikely that decrease of gonadal function is the only etiologic factor, experimental evidence now indicates that estrogens do have therapeutic value.⁸ Treatment courses of a few months or less have produced calcium retention and a decrease of bone-resorbing surfaces in most patients studied. However, studies made after 9 months or more of treat-

ment indicate that these favorable short-term effects are not maintained: bone-resorbing surfaces increase slightly (that is, return toward the pretreatment status), bone-forming surfaces and radiocalcium accretion are sharply decreased, and calcium retention decreases.⁵ Nevertheless, estrogen therapy for up to 10 years appears to have a favorable effect by decreasing the loss of bone mass (as assessed by *in vivo* measurements of bone mass) in nonosteoporotic postmenopausal women⁹ and by a decrease in the rate of fractures in osteoporotic women.¹⁰

For optimal results, cyclical courses of at least 1.25 mg of conjugated equine estrogens daily, or an equivalent dose of another estrogen preparation, seem to be necessary. Unfortunately, this dose is poorly tolerated by many postmenopausal women. About half experience regular withdrawal bleeding. Breakthrough bleeding and menopathia hemorrhagica requiring diagnostic uterine dilatation and curettage are not uncommon. Breast tenderness and dependent edema are other troublesome effects.

Androgens.—Androgens also produce short-term calcium retention in osteoporosis. However testosterone should not be given to osteoporotic females because effective therapeutic doses invariably induce severe virilization. Osteoporotic men tolerate this hormone well, except for occasional symptoms resulting from prostatic hypertrophy. Increases in plasma lipids may require adjustment of the dosage. Parenteral administration of androgens is preferred because it is less likely to produce hepatic dysfunction. Testosterone enanthate, 200 mg intramuscularly every 2 weeks, or a comparable dose of another preparation, is recommended.

Synthetic Anabolic Agents.—In the 1950's, synthetic androgens were developed which had anabolic activity equal to that of testosterone but markedly less virilizing properties. These agents seem to be indistinguishable from estrogens with respect to their effect on bone in postmenopausal osteoporosis.⁵ Sulfobromophthalein (Bromsulphalein) retention regularly accompanies their use, because of interference with hepatic transport of this dye, but it appears to be of no clinical significance. However, abnormalities of liver function may occur in a small proportion of treated patients and may necessitate decrease of dosage or discontinuation

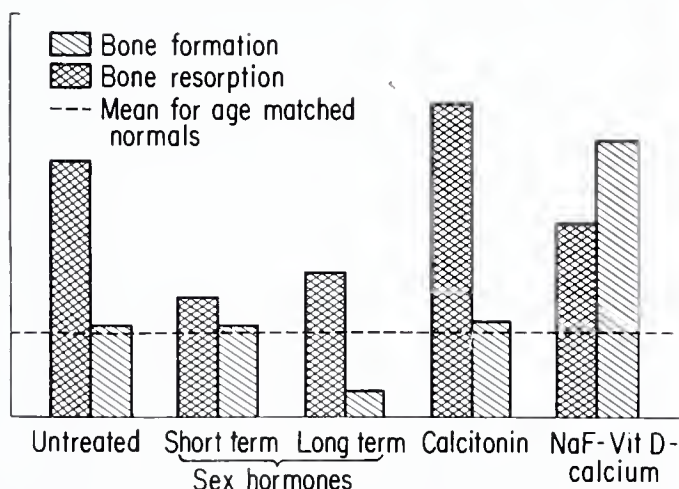


Fig. 3. Diagram of effect of five different therapeutic agents thus far studied in our laboratory on bone formation and bone resorption. These agents are sex hormones (estrogen and anabolic hormones), diphosphates, calcitonin, and combined therapy with sodium fluoride, oral calcium, and vitamin D.

of therapy. Dependent edema, increase of plasma lipids, or (in females) mild signs of androgenicity develop in perhaps one-fourth of treated patients. A daily dose of 5 to 10 mg of oxandrolone, or an equivalent dose of another preparation, is recommended.

Oral Administration of Calcium.—Calcium was widely used in the treatment of osteoporosis during the 1930's but fell into disrepute in the 1940's because of the suggestion of Albright and associates that the disorder resulted from a defect in synthesis of the protein matrix of bone. However, more recent observations are consistent with the belief that parathyroid hormone has at least a permissive role in maintaining bone resorption. Consequently, if sufficient calcium is administered orally, it might be anticipated that parathyroid hormone secretion will be inhibited and that bone resorption will be decreased. Metabolic balance studies have detected calcium retention after large supplementary doses of calcium, but this effect tends to decrease with continued treatment.¹¹

Calcium supplements are well tolerated except for minor gastrointestinal symptoms in some patients. The diet recommended earlier (see General Treatment) supplies about 800 mg of calcium. To this, supplements of 1 to 1.5 g of calcium may be added; the carbonate salt is preferred. Serum and urinary calcium values should be determined periodically during therapy.

Calcitonin.—In mammals, calcitonin (a polypeptide hormone) is secreted by cells of ultimobranchial origin in the thyroid gland. The predominant action of calcitonin on bone is to decrease resorption by changing the structure and function of bone cells (osteoclasts and perhaps certain osteocytes). This, along with a minor hypercalciuric renal effect, leads to a decrease in the serum calcium concentration.

Since the major abnormality in postmenopausal and senile osteoporosis appears to be an absolute increase in bone resorption, calcitonin theoretically seems to be an ideal agent for treatment. However, we have found that, because of its hypocalcemic effect, administration of calcitonin alone results in a secondary increase in parathyroid hormone concentration

and a proportional increase in bone resorption.¹² Preliminary studies suggest, however, that concurrent oral administration of calcium supplements will prevent the secondary hyperparathyroidism and may allow a favorable effect of calcitonin, a decrease in bone resorption, to become manifest.

Intravenous Administration of Calcium.—Recently it was found that, in a group of osteoporotic patients given calcium by daily infusion for 2 to 3 weeks, about half had a favorable response consisting of clinical improvement, increase of calcium absorption, net calcium retention, and decrease of resorption surfaces (assessed microradiographically).¹³ These effects were still present on reevaluation several months later. It was suggested that the calcium infusions suppressed secretion of parathyroid hormone. Although theoretically interesting, this approach would not be a practical form of treatment for most osteoporotic patients.

Diphosphonates.—The diphosphonates (synthetic compounds that are chemically similar to pyrophosphate) have been reported to decrease the amount of bone loss occurring with limb immobilization in growing rats; this observation raised the hope that they would prevent bone loss in osteoporosis in humans. However, in man the administration of the diphosphonate, Na_2EHDP , produced hyperphosphatemia and histologic osteomalacia without decreasing bone resorption.¹⁴ Pending further studies, the use of such compounds in treatment of osteoporosis cannot be recommended.

Phosphate.—Oral phosphate supplementation, in doses of 1 to 3 g of phosphorus daily, produces calcium retention in a number of metabolic bone diseases, including osteoporosis; however, the mechanism of this retention is controversial. In adult men, a single oral dose of 3 g of phosphate in solution has been reported to produce a decrease in serum ionized calcium and an increase in immunoreactive parathyroid hormone concentration;¹⁵ also, increasing the dietary phosphate given to adult rabbits and dogs increased the resorption and porosity of bone and the retention of ^{85}Sr in both hard and soft tissues.¹⁶ Finally, long-term oral administration of phosphate supplements to immobilized nonosteoporotic subjects decreased

the external loss of calcium but failed to prevent loss of trabecular bone (assessed by photon absorption densitometry of the calcaneus).¹⁷ For the present, oral administration of phosphate cannot be recommended for osteoporotic patients in general.

Fluoride.—Some persons who live where there is a high concentration of fluoride in the drinking water, as in the Punjab region of India, and miners who inhale cryolite (sodium aluminum fluoride) dust develop a crippling disease characterized by excessive bone density, bone exostoses, and ligamentous calcification. A much larger number of affected persons, however, exhibit only an asymptomatic increase in the radiodensity of the skeleton. Therapy of osteoporosis with sodium fluoride is based on the premise that induction of subclinical fluorosis would strengthen the skeleton but not lead to undesirable changes.¹⁸ Several investigators have reported that fluoride therapy produces small but sustained calcium retention as assessed by metabolic balance studies.

Morphologic study of bone biopsy specimens from both experimental animals and humans has shown that the predominant effect of fluoride therapy is osteoblastic stimulation. The newly formed osteoid tissue is poorly mineralized and has the histologic features of osteomalacia. Studies in experimental animals have shown that the excessive formation of osteoid tissue during fluoride administration can be prevented by supplementary dietary calcium.¹⁹ In man, the skeletal effect depends on both the dose of administered fluoride and the amount of available dietary calcium. Microradiographic studies have shown that therapy combining 50 mg of sodium fluoride daily, calcium supplementation of 600 mg or more daily, and vitamin D intake of 50,000 units twice weekly can increase the formation of histologically normal bone two- to fourfold while bone resorption is decreased.²⁰ Side-effects reported thus far are minimal and consist of transient arthralgias or gastric dyspepsia.

Combination Therapy.—Therapy for osteoporosis must not only prevent further bone loss but also add new bone to the skeleton and thus reverse the osteoporotic process. Based on current data, a combination of therapeutic agents might approach this goal. Each agent in this

combined program is used for a specific purpose. Sodium fluoride is used to stimulate bone formation. Calcium supplements and vitamin D are used to prevent incomplete mineralization of the newly formed bone and secondary hyperparathyroidism, both of which may occur when fluoride is given alone. Estrogen is given to decrease bone resorption further. This program should eventually result in a measurable increase of bone mass and cessation of spinal and femoral neck fractures.

However, sodium fluoride is classified as an investigational drug by the Food and Drug Administration and so is not presently available for routine clinical use. Until the long-term safety and efficacy of fluoride therapy have been established, the clinician must continue to rely on more conventional forms of therapy. We have found that combination therapy with sex hormones (estrogen or an anabolic hormone) and calcium supplementation is generally effective in preventing or slowing further bone loss; however, because of the delayed effect on decreasing bone formation, therapy with these agents will not increase bone mass.

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Office Orthopaedics

Examination of the Acutely Injured Knee in the Athlete

Philip H. Johnson, M.D.*

Anatomy

The knee is the most vulnerable area to injury in the athlete.

First, it is primarily a hinge joint¹ with little provision for rotation and lateral strain. This motion is controlled by the following ligaments (Fig. 1):

- (1) Medial collateral ligament (M.C.L.), two layers:
 - a) deep: a dense thickening of the medial capsule to which the medial meniscus is attached.
 - b) superficial: similar origin, inserts 2 inches below the joint on the anterior medial side of the tibia.
- (2) Lateral collateral ligament (L.C.L.): origin on the femoral condyle extends to the fibular head: completely outside the joint.
- (3) Iliotibial tract (I.T.T.): a fascial band from the tensor fascia femoris inserting into the lateral tibial flare: with the L.C.L. it supports the lateral side of the knee.
- (4) Anterior cruciate ligament (A.C.L.) and posterior cruciate ligament (P.C.L.): criss-cross ligaments in the intercondylar notch, vital to antero-posterior stability.

Secondly, there are two intrasynovial spacers, the menisci, which fill the crevice formed by the upward curving femoral condyles and the flat tibial plateau, and are easily caught and torn between these two bony surfaces.

Nomenclature²

Contusion: Soft tissue swelling, tenderness, and ecchymosis from a direct blow.

2. Standard Nomenclature of Athletic Injuries, American Medical Association, 1966.

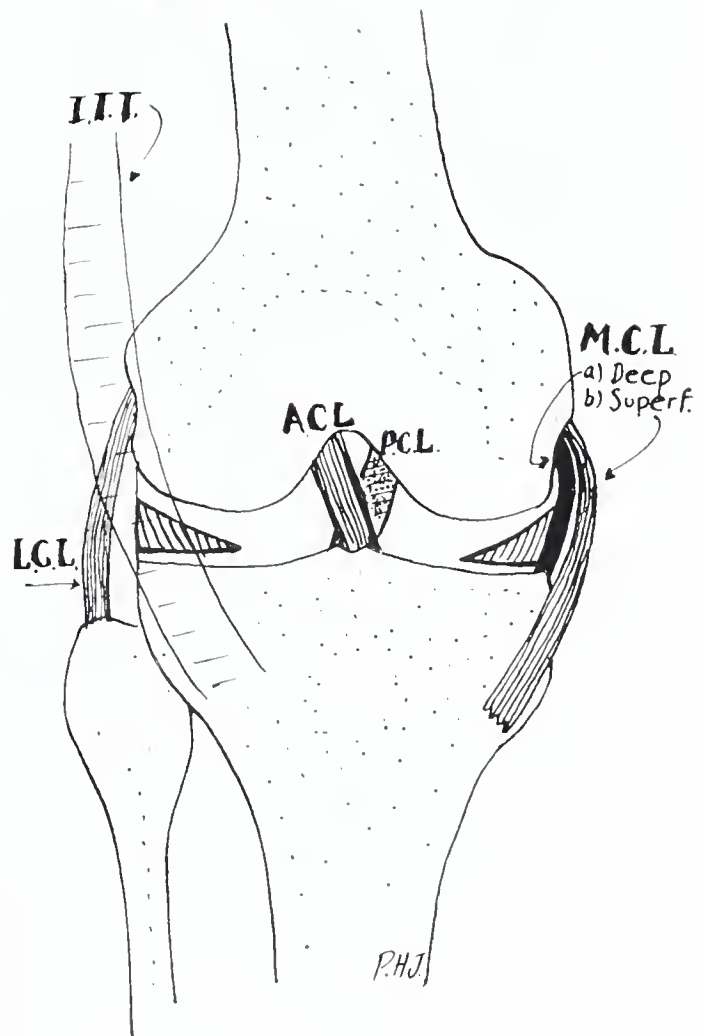


FIG. 1.

*P. O. Box 5270, Little Rock, Arkansas 72205.
1. Ginglymus Diarthrosis.

Strain: Tearing of a muscle and/or tendon unit.

Sprain: Tearing of a ligament stretched suddenly beyond its elastic limit.

First degree (mild): no instability. Symptomatic treatment only, no splints needed.

Second degree (moderate): little or no instability. Treat with splints, rest, followed by rehabilitation.

Third degree (severe): completely torn. Surgical reconstruction is indicated.

The following will not be discussed in this practical presentation of physical findings because:

Fractures (including osteochondral fractures): are usually diagnosed by x-ray.

Muscle ruptures (sprains): usually occur in the older patient, the injury is above or below the joint and not usually a diagnostic problem.

Posterior cruciate sprains: as an isolated injury it is very unusual, is difficult to diagnose without avulsion of bone (x-ray evidence).

Subluxing patella: may mimic meniscus lesion but tends to be a chronic recurrent problem.

Bursitis: in the acute form is usually prepatellar and is not a diagnostic problem.

Osgood-Schlatter's disease and tendinitis: are chronic problems.

In the final analysis the team physician is usually left with two questions: (1) Is there a significant injury to a ligament or meniscus? (2) How serious? Non-surgical (contusions; minor ligament injury) or surgical (torn mensicus; completely torn ligament)?

Physical Examination

After a thorough history (which should include exact mechanism of injury, which direction and angle the knee was forced, was there a pop,

could he leave the field under his own power or continue to play; length of time from the accident to maximal swelling, whether or not complete motion was present immediately) the physical examination is performed with attention to the following (Table I).

(1) Effusion

- a) Blood (hemarthrosis): occurs within first 1-3 hours; from rupture of a ligament or blood vessels at the periphery of a meniscus.
- b) Serous: occurs over a period of 1-3 days due to "irritation" within the joint; usually a meniscus injury within its avascular substance.

Findings

- a) Medial collateral ligament (M.C.L.): deep layer torn at its insertion into the tibial plateau at the joint line usually produces moderate hemarthrosis. Rupture of the origin from the femoral condyle may have very little effusion.
- b) Lateral collateral ligaments (L.C.L.): outside the joint completely, no effusion.
- c) Anterior cruciate ligament (A.C.L.): a vascular ligament within the joint; rupture produces massive hemarthrosis.
- d) Meniscus: torn at periphery — blood effusion; torn within substance — little or no effusion.

(2) Point of Maximum Tenderness

- a) Medial and lateral ligament injuries — tenderness over portion of ligament torn usually above or below the exact joint line.
- b) Anterior cruciate — with isolated lesion, no specific tenderness.
- c) Meniscus — tender at the exact joint line,

TABLE I
PHYSICAL FINDINGS

	M. C. L.	L. C. L.	A. C. L.	MENISCUS
Effusion	±	0	+++	±
Tenderness	above or below joint line	above or below joint line	0	at the joint line
Stability	lax medially in 30° flexion	lax laterally in 30° flexion	± drawer sign	normal
Range of Motion	decrease in flexion due to pain	decrease in flexion due to pain	decrease due to effusion	decrease in ex- tension due to mechanical block
Popping	0	0	0	usually +

anterior or posterior depending on site of lesion.

(3) *Stability*

The proper determination of stability is the key to diagnosing a significant ligament injury (third degree sprain). This is most easily done with the patient sitting on the examining table with the leg hanging over the side. If the knee is unstable to medial strain in complete extension a massive tear of the medial structures (M.C.L.) and posterior capsule as well as anterior cruciate ligament has occurred. To examine for complete but isolated lesions of the M.C.L. or L.C.L. place the knee in 30 degrees of flexion and with the examining finger over the joint produce medial then lateral strain; with complete tears absence of "stopping" by the ligament will allow opening of the joint an inch or more before the surrounding muscles are reflexly contracted by the athlete due to pain. These complete lesions of the M.C.L. or L.C.L. should be repaired surgically for best results. Anterior cruciate integrity is examined with the knee flexed 90 degrees over the table, by pulling forward on the upper tibia (the "drawer sign"). Instability (torn A.C.L.) is evidenced by excessive forward travel of the tibia. Three words of caution:

- a) A torn A.C.L. may have a negative drawer sign due to the restraint of muscle spasm, making the diagnosis difficult. An isolated tear of the A.C.L. is a much more common lesion than is generally appreciated. Frequently the entire examination is negative with the exception of a marked hemarthrosis and the history of a definite pop at the time of injury. This may be easily misinterpreted as a torn meniscus.
- b) Always compare drawer signs and strain tests with the normal uninjured knee. Some athletes have more than normal ligamentous laxity.
- c) Due to pain produced, examination under general anesthesia may rarely be necessary (x-ray strain films have little practical value except as a permanent record).

(4) *Range of Motion*

Joint range of motion is restricted due to three things. The determination of which, and to what extent, is helpful in the general assessment of the etiology and extent of the injury.

- a) Pain: limitation of full flexion early, is commonly produced by injury to ligamentous and capsular structures.
- b) Effusion: range of motion limited in flexion, and sometimes even in extension may be due to distension of the joint by fluid as might be anticipated with a torn A.C.L.
- c) Mechanical block: the "locked knee" is typically a knee with limitation of the last 30 degrees extension from a bucket handle tear of the meniscus. Beware, however, of hamstring spasm after the first 24-36 hours which can very convincingly mimic a locked knee.

(5) *Popping*

A loud pop frequently occurs at the time of the injury when a major ligament or meniscus is torn. The popping which will be obtained on physical examination will be due to an intra-articular obstruction (torn meniscus) to smooth motion. This is elicited with the patient supine, passing the knee through its range of motion. A positive McMurray test is a "clicking", obtained at the medial joint line when moving the knee from full flexion into extension with the tibia externally rotated fully (torn medial meniscus). The maneuver is repeated with the tibia rotated internally (torn lateral cartilage). The posterior horn of each meniscus in turn is passed between the femur and tibia and a torn or separated portion caught, producing the "click". But the acutely injured knee is difficult to force into full flexion therefore this test is more useful in the diagnosis of chronic problem. To make an accurate diagnosis of a torn meniscus 100% of the time requires superhuman powers and an understanding of demonology. For this reason double-contrast arthrography (renograffin and air) is a valuable diagnostic tool and in certain cases essential for accurate preoperative diagnosis.

Early and accurate diagnosis is the key to effective treatment, surgical or non-surgical. There is no place for "trial" conservative treatment in the care of complete ligament injuries. Early surgical reconstruction yields a stronger repair, earlier and more complete return to competition. At the same time surgical exploration without a definite objective is unjustifiable. The secret of effective treatment in knee injuries lies in early diagnosis, made after a careful and systematic examination.



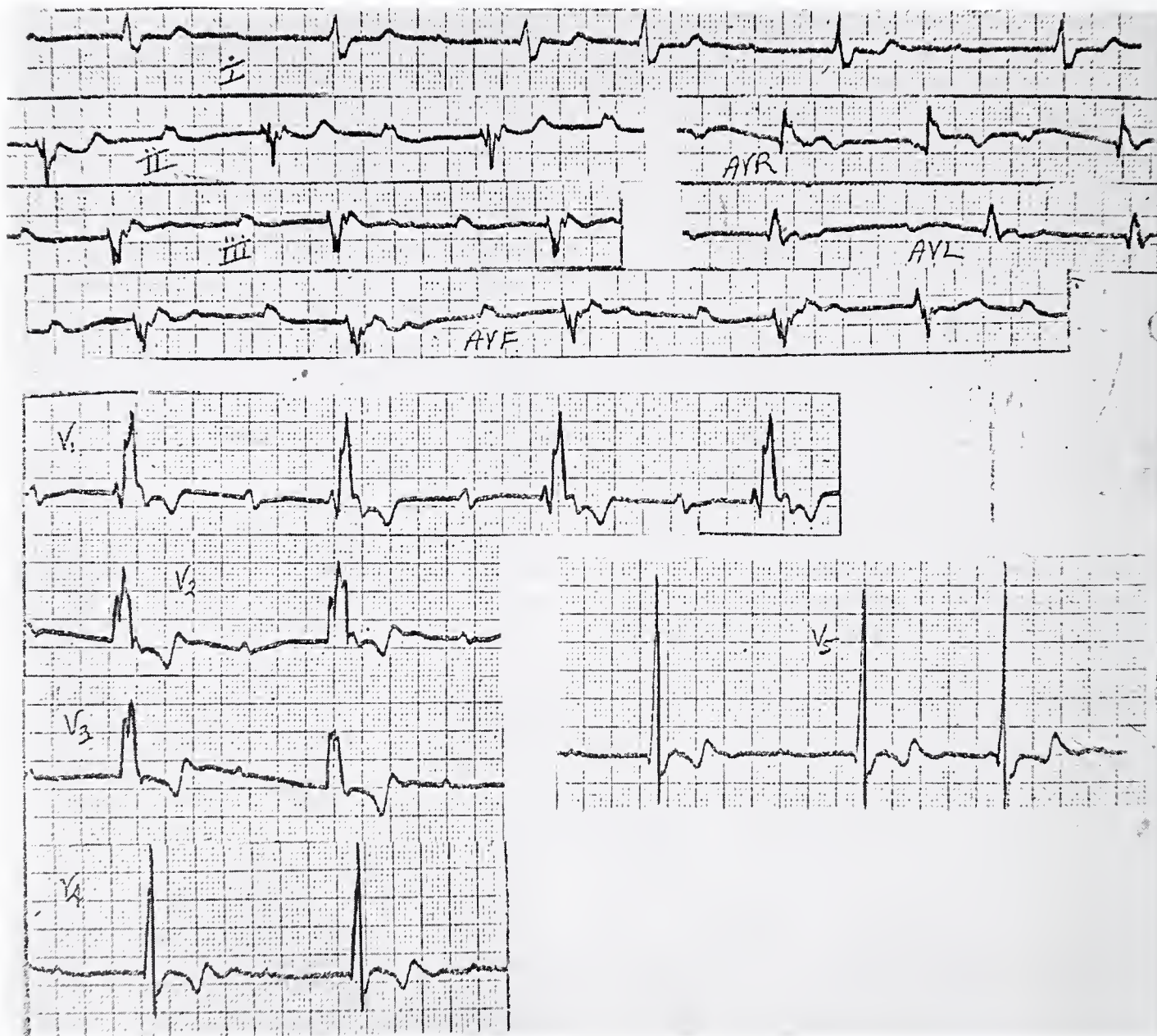
ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

47-year-old white male with McGovern Aortic valve replaced approximately two years ago for aortic stenosis. Has had bout of congestive failure and is currently digitalized because of this.

(See Answer on Page 342)



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Arkansas: Health Status Evaluation January 15, 1974

Marshall Burford*

Research in Great Britain and in the United States, and the experience of the Community Demonstration Section of the Center for Disease Control, reveal that morbidity, mortality, numerous health problems, and the non-use of health services occur in inverse relation to the socioeconomic status. Stratification helps us to identify the high, middle and low socioeconomic groups, and to understand why the prevalence of diseases and other health problems is higher in the low groups.

In June, 1972, the Ozarks Regional Commission entered into an agreement with the Arkansas State Department of Health for providing the Commission a health evaluation report concerning specific health problems and services in the Ozarks Region in Arkansas. The Ozarks Region at this time included 44 counties within Arkansas and parts of Oklahoma, Kansas and Missouri. At a later date, the Ozarks Region would be expanded to include the entire state of Arkansas, Oklahoma, Kansas, Missouri and Louisiana. The Commission simultaneously proposed agreements with these states to furnish the same report for their respective states. Each state would submit a separate report. These reports could then be merged and the result would be a health evaluation of the entire Ozarks Region. Personnel of the Center for Disease Control would serve in an advisory-management capacity to state coordinators on evolving program activities and the methodologies of achieving program objectives. Each state program would be involved with primarily identical data items. Tolerance was allowed so that a state could expand its data collection to an area if deemed desirable. The specific data items to be recorded were as follows: health manpower, health facilities, morbidity, mortality, live birth and infant death

data. Morbidity data for the five year period, 1968 through 1972, includes infectious hepatitis, active tuberculosis, new active tuberculosis, infectious syphilis (primary and secondary), other stages and gonorrhea. These diseases were recorded by address and age.

Mortality data for the three year period 1969 through 1971 includes deaths due to heart and malignant neoplasms, which were recorded by address, age and sex. Other mortality, vascular lesions, auto accidents, non-auto accidents, pneumonia, diabetes mellitus and maternal deaths were recorded by address and age. Morbidity and mortality data for their respective time periods were totaled by strata and specific rates determined.

Those addresses were plotted on a community map that had been previously stratified. Stratification helps identify groups of people who are homogeneous among themselves yet heterogeneous to other groups of people. Stratification is accomplished by several methods. The methods of stratification used in Arkansas were determined by populations. For example, communities with a population of 50,000 or above were handled individually. That is, these communities were stratified by use of published census tract data. The census tract criteria used in Arkansas communities with populations of 50,000 were median income, median education and per cent 1.01+ crowding factor. These criteria were assigned a point value and scaled so that distinct strata differences by census tracts resulted. These communities involved large enough populations so that rates based on each strata were reliable and meaningful. Once these communities were stratified, it became a matter of pinpointing by address all reported morbidity and mortality data for the specific time period. Rates

*Arkansas State Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

were then tabulated by disease or death by strata.

Those Arkansas communities with a population between 25,000 to 49,999 were stratified slightly differently. Census tract data was not available for communities of this size. However, previous experience supported the use of average housing price per enumeration district to determine strata. Once again, by using a scale of average housing prices, a definite strata was established. These communities were handled separately because of their sizable populations. It is interesting to note that all communities do not necessarily stratify into three strata (high, middle and low).

Arkansas' communities with population ranging between 2,500 and 24,999 were stratified differently. These communities were stratified by use of average housing price per enumeration district. Since these populations were smaller and could not stand alone, it was necessary to combine all the high strata from each community within a planning district. The middle and low strata were also combined from each community within each planning district. The state is divided into eight economic and planning districts. Therefore, each strata within communities with populations between 2,500 to 24,999 were combined separately so that a sizable population would produce responsible rates.

Another population base used was the Arkansas' communities with populations between 1,000 to 2,499. These communities were not stratified into separate strata (high, middle and low), but were termed one strata communities. As before, these communities were combined within each planning district to obtain a workable population.

All other communities (populations of less than 1,000) were defined as rural, combined within planning districts and rates compiled accordingly.

By using this method of socioeconomic stratification, specific high or low incidencies of disease were readily identified. Morbidity and mortality rates by strata may be compared within a particular community or between communities. Rates for larger regions such as planning districts may be examined also. This format enables health personnel to not only concern themselves with overall state or county rates for various morbidity or mortality, but also smaller sections of populations.

It was quite obvious that the rates were heavily dependent upon disease reporting by physicians. In several instances, it was apparent that under-reporting does exist for a few diseases.

A unique aspect of this process of identifying areas of health problems is that once a community is stratified socioeconomically, any reportable disease or environmental situation may be plugged into it. Once the data has been plotted and analyzed, one is able to determine if any definite trends occur. For example, in Little Rock, Arkansas, population above 50,000, new active tuberculosis average annual rates (per 100,000) for the five year period, 1968 through 1972, were as follows: high strata—9.8, middle strata—33.6, and low strata—55.3. Another example, the city of North Little Rock, population above 50,000, reflected new active tuberculosis rates by strata as follows: high strata—11.4, middle strata—24.9, and low strata—87.8. After the health problem has been recognized, definite steps may be taken to delineate high disease incidence.

Several objectives may be concluded from this approach. Health personnel may express the health problem and needs in easily understood terms, using aids such as colored cartograms. Comprehensive plans for action programs to meet health needs of individuals, families and groups in a community may be developed.

The Community Disease Control Demonstrations concept is that the most effective way to reduce the incidence of all preventable diseases is a comprehensive, multi-faceted effort that involves related health agencies and all consumers of health services. The concept relies on man's ability to reason and to improve his own health status, but the method of motivating an individual or groups to act varies according to his social status. Man will participate in health enhancing activities in regard to education and motivation if his point of view, attitude, values, knowledge, prejudices, behavioral patterns and mode of living are taken into consideration. The effort must be focused on the needs (social, cultural, biological, physical) of groups as well as individuals. This approach aids the planning process.

Once an area with a high incidence of disease or environmental problem is pin-pointed, health personnel are able to design a program to attack and eliminate the problem situation.



EDITORIAL

Harris and Heaney Report on Bone

Alfred Kahn, Jr., M.D.

The reviews in *The New England Journal of Medicine* are always medical highlights. Recently, Harris and Heaney have reported on "Skeletal Renewal and Metabolic Bone Disease" (Vol. 280, p. 193, Jan. 23, 1969). As they point out, the skeletal system stops growing longitudinally with maturity but cancellous and cortical bone constantly undergo change; this not alone produces skeletal integrity or weakness, but it also contributes to calcium homeostasis. There are three types of bone cell: the osteoblast manufactures matrix and causes the deposition of calcium compounds; the osteocyte, an imprisoned bone cell; and the osteoclast which removes bone mineral and matrix.

Bone formation consists of calcification of collagen fibrils laid down by the osteoblasts which lays down matrix at the rate of one unit per day linearly and the border is about six units thick. It is suggested that the deposition of mineral occurs five to ten days after the matrix is formed. Bone forms by a nuclei or nidus appearing on which the extra cellular fluid precipitates out minerals after nucleation of the matrix. Seventy percent of the calcification will occur within a few hours. Osteoclasts remove bone probably by enzymatic removal of calcium and minerals simultaneously; the life span of the osteoclast is only a day or so compared to a week or so for an osteoblast, but the former can remove eight times as much bone as the latter can make. Osteocytes are present in lacuna in bones and it is suggested that the osteocyte maintains the physiological and structural integrity of bone.

Bone has been studied by a variety of methods including calcium kinetics in which there is a short term and a long term deposition of calcium

demonstrable, morphometric methods, surface measurements, studies of hydroxy-proline radiography, mineral balance studies, etc.

Harris and Heaney compared the control of skeletal remodeling to two control loops with negative feedback; they are the control of calcium homeostasis by parathyroid-calcitonin inner workings and, secondly, the results of physical stress (meaning the skeletal adapts to physical needs). Parathyroid hormone and calcitonin work principally on bone resorption: the former causes a rapid release of calcium probably by osteocytic osteolysis. Parathyroid hormone causes an increased number of osteoclasts and this is the main effect. Calcitonin retards or slows or stops bone resorption. Certain substances or chemical situations accelerate bone resorption through interference with osteoclasts as Vitamin D deficiency, heparin, etc. The authors stress that the tissue response to parathyroid hormone is separate from the chemical response. How mechanical stress helps mold bone is really unknown but it may be through electric currents.

It is of interest that bone formation and bone resorption may occur simultaneously or these two effects may take simultaneous opposite directions.

The authors state that during the 40's the skeletal mass begins to diminish and it has five characteristics: the skeletal mass is greater in young men than young women and greater in Negroes than whites; bone loss starts at an earlier age in women; the female bone loss starts before the menopause; the loss is greater after the menopause; the bone loss is less in Negroes than whites. It is of interest that they report that qualitatively bone changes in the fourth decade; the osteons are incompletely formed and

there is an increase in the bone cortex of non-viable portions.

The hormones effect on bone was discussed in depth by Harris, et al.; calcitonin is said to decrease both calcium and phosphorous in the blood by the inhibition of bone absorption; it interferes with the release of calcium from bone and the formation of new osteoclasts. Theoretically, one would suspect that excess calcitonin is the cause of osteopetrosis and in some cases this might fit, but there are certain aspects which do not fit. Furthermore, the authors do not suspect decreased calcitonin as a cause of osteoporosis. Thyroid hormone has no specific effects on bone but exerts its effect on cellular metabolism; hyperthyroid causes a release of calcium to increase remodeling of bone in which bone resorption is greater than new bone formation. In hypothyroidism, there is a decrease in bone remodeling and a decreased bone blood flow. Pituitary growth hormone stimulates bone formation of all types. The authors speculate on its effect because growth hormone is released intermittently and has a half life of only twenty minutes. The gonadal hormones decrease bone resorption and have little or no effect on bone formation. Adrenal cortex steroid hormones effects vary in different animals; in man, they cause increased bone resorption and some probable decreased bone formation.

Osteomalacia is characterized by an excessive bone matrix and a decreased appositional growth rate. There are three types: Vitamin D deficiency, hypophosphatemia with normal Vitamin D intake, and defective nucleation with apparently normal blood chemistry. There is a delay in the calcification of matrix from the normal five to ten days to two to three months, and the bone formed is not normally dense. The authors speculate that this disease could be due to a faulty enzyme under control of the osteoblasts.

Harris and Heaney define osteoporosis as a skeletal disorder in which the bone present per unit volume is decreased although the composition is normal. There are different types of osteoporosis all characterized by a higher rate

of resorption than bone formation as corticosteroid osteoporosis, local osteoporosis as in disuse, space flight, senile, etc. The authors pose three questions concerning senile and postmenopausal osteoporosis: "Why a universal age related loss of skeletal mass occurs. The second is why the rate of loss is accelerated in postmenopausal females. And the third is whether the patients who show clinical manifestations of this universal process are different by virtue of other abnormalities superimposed—." They point out that where calcium has been studied by tracers, osteoporotic patients have a normal turnover of calcium; resorption was in the normal range yet the actual fact is that skeletal calcium loss exceeds deposition by 50 to 100 oz. per day. The authors' answer to this paradox is that the normal are based on total body weight and size but senile individuals have a reduced skeletal mass and this accounts for the seeming confusion. It was pointed out that the menopause seems to accelerate senile osteoporosis for unknown reasons. Changes in the body's sensitivity to parathyroid hormone has been suggested as a possible cause of osteoporosis but this is unproved. Various treatments for senile osteoporosis have been tried without success so far: gonadal hormones, calcium fluorides, etc.

The parathyroid glands principally regulate calcium ions, and Harris and Heaney state that any skeletal effects are purely secondary phenomena. In hypoparathyroidism, both bone formation and resorption are reduced. In hyperparathyroidism, there is increased skeletal remodeling. Kinetic studies are said to show increased pools, turnover, accretion, and resorption. A few patients with hyperparathyroidism have normal kinetics; and furthermore, a number of patients do not have negative calcium balances and bone loss is slow. It is postulated that these paradoxes may be understood if one considers the body's compensatory mechanisms in hyperparathyroidism.

This New England Journal of Medicine review is outstanding and should be "must" reading.



MEDICINE IN THE



THE MONTH IN WASHINGTON

Little noticed amid congressional confusion in attempting to deal with the energy crisis was the passage of a major health bill shortly before adjournment. The bill provides \$375 million over five years to support the development of Health Maintenance Organizations (HMO's) across the country.

If signed into law by the President, the HMO legislation will go far in determining both consumer and provider acceptance of prepaid group health care. Despite a substantial flow of federal dollars into the experimental program, HMO's are not expected to encounter easy sailing. Ardent supporters of the program admit the trial period will be a rough one and caution against over optimism.

The speculation is that the President will sign the bill inasmuch as the money provided is not far over what the Administration originally requested, though the bill is much broader in scope than the President wished.

Two key provisions of the \$805 million bill first approved by the Senate earlier this year were deleted or watered-down in conference to make the measure more palatable to the administration. One would have authorized federal subsidization of HMO premium costs for people who couldn't afford all or part of the cost. The other controversial Senate section would have created an independent Commission on Quality Health Care Assurance to supervise the HMO program. The compromise bill vests this responsibility with the Assistant Secretary of HEW for Health.

To qualify for federal aid, HMO's must meet a long list of federal standards of minimum benefits, stay open 24 hours a day, provide open enrollment, and conform to numerous other requirements. Inducements are provided to attract people from poor and rural areas.

The Senate provision authorizing grants to assist HMO's in meeting operating deficits during the initial three years of operation was

knocked out of the final bill, but a loan fund was retained to aid HMO's in meeting "a portion of initial operating costs in excess of gross revenues."

Co-payments were barred under the Senate bill. However the conference agreed to allow HMO's to charge nominal co-payments, but not to the extent they could be considered a barrier to seeking treatment. The conference committee said the co-payments are aimed at enabling an HMO "to market its benefit package at a competitive price."

The final bill requires larger employers to offer workers an HMO option when existing contracts for health insurance expire provided that a qualified HMO is operating in the area.

The bill does not provide a specific number of HMO's, but the bill's legislative history indicates the Congress had in mind around 100 programs.

* * *

Rep. John Rarick (D., La.), principal congressional sponsor of legislation to repeal the Professional Standards Review Organization (PSRO) program, has dispatched a letter to all members of the House urging their support.

In his letter, Rarick said PSRO "is the hottest controversy facing medical doctors and their patients. The American Medical Association's prestigious House of Delegates yesterday voted to seek congressional repeal of this controversial peer-review law that goes into effect on 1 January 1974."

Rarick quoted AMA President-elect Malcolm C. Todd, M.D., as calling PSRO "... The greatest threat to the private practice of medicine of any piece of legislation ever passed by congress."

The PSRO section of Medicare was added by the Senate and was never adequately debated, the lawmaker said. "The House did not even hold public hearings on this issue."

Rarick cited the Wall Street Journal's statement on PSRO — that points out that "the controversial legislation is laced with pointed references to 'new obligations imposed on' medical

practitioners. It requires physicians to open their private files and hospital records to outside inspectors. Strong financial sanctions are provided for physicians who fail to comply."

Rarick wrote that he is concerned over the effect of the legislation on private medical practice in this country. "I am convinced that the medical profession has done an outstanding job of policing its own profession and establishing a high code of ethics. It simply does not make sense to bog down the medical profession with further government intervention that threatens the relationship between doctor and patient."

* * *

The first round of congressional hearings on National Health Insurance (NHI) concluded following a week of testimony from experts in the health-economic field who laid a general philosophical foundation for full-scale legislative sessions early in the new year.

The hearings by the House Health Subcommittee were the opening gun in what promises to be a busy 1974 in congress on the issue of a NHI bill.

The Subcommittee, headed by Rep. Paul Rogers (D., Fla.), has charted six weeks of further testimony in January and February that will consider specific legislative proposals. The House Ways and Means Committee also is slated to explore NHI sometime next year. Senate sessions are expected to open during the winter or spring by both Senate Finance and Senate Labor and Public Welfare Committees.

The next major development in the field will be the formal disclosure of the details of the Administration's new plan, expected to be unveiled in President Nixon's January State of the Union speech to congress and probably in a special message to congress on health.

The new Administration plan will be more liberal than the previous one, but it will continue to be based on the principle of requiring employers to furnish comprehensive health insurance to their workers. The major changes are a broad catastrophic provision tied to income and federal subsidization of premiums for all poor people. Medicare and Medicaid, apparently, would lose their separate identities and become part of the new program under the jurisdiction of the Public Health Service.

According to Budget Director Roy Ash, NHI

should be kept to a size that will avoid creating more demands for health services than can be met with existing resources. Otherwise, he said in an interview with the New York Times, there is a danger that the sole accomplishment would be an increase in the prices of health services.

Many of the witnesses before Roger's Subcommittee predicted that a financing mechanism for NHI without other provisions would add to inflation of health care costs without much impact, if any, on the health of Americans. Other experts questioned whether any type of NHI would improve health, contending that environment, life styles, poverty, etc., are to blame for poor health conditions.

The closest approach to a consensus was that too much hope should not be placed in a NHI program to solve the health care problems of the nation.

One of the final witnesses, Robert J. Myers, former Chief Actuary of the Social Security Administration, denied there has been any crisis in health care costs, asserting that health has simply been caught up in the "general price and wage inflation resulting from the Viet Nam war, plus the more rapid wage increases of hospital personnel . . . plus the historical trend of medical care costs rising more rapidly than the general price level . . ."

Myers said there is "far too much" first dollar coverage in private health insurance and not enough catastrophic coverage. Catastrophic, he said, "is sorely needed by most Americans" and should vary with income and assets.

"I am convinced that cost-sharing provisions, properly designed, can have a beneficial effect in preventing overutilization without being an unjust economic barrier that will result in preventing the insured from receiving necessary medical care . . ."

Under a sweeping NHI such as proposed by Sen. Edward Kennedy (D., Mass.), and labor "the providers of services might rebel if the financial screws on them are tightened too rapidly or too much, or the beneficiaries might rebel if they are regimented or controlled too much as to their desires for medical services," Myers told the subcommittee.

Herbert Denenberg, Pennsylvania Commissioner of Insurance, asked for strict cost and quality controls in any NHI program. "Pump-

ing more dollars into a health care system with serious structural shortcomings will aggravate present problems."

Earl Brian, M.D., California Secretary of Health, stressed that the cooperation of organized medicine and other health providers is necessary for a NHI program to work. Otherwise, the nation's health care system will deteriorate, he said. As many responsibilities as possible should be left to the providers, according to Dr. Brian. He cited the cooperation of organized health groups in California despite state controls that have "alienated the health care community." The demand for medical care will always exceed the dollars available, he said, so any program must contain restrictions which relate it to the free market system. The present concern over Professional Standards Review Organizations is only a harbinger of what would happen if a bureaucratic NHI were enacted and demonstrates the "imprudence of permanent government controls," he asserted.

* * *

Sen. Edward Kennedy's Health Subcommittee hearings on the drug industry lived up to their explosive expectations with HEW Secretary Casper Weinberger throwing the first bomb by announcing that the Administration would propose a cost-saving drug plan for Medicare and Medicaid patients under which reimbursement would be limited to "the lowest cost at which the drug is generally available."

Estimating the savings at from \$25 to \$60 millions a year, the HEW proposal was a blow to the pharmaceutical industry which viewed it as a step toward generic prescribing and a setback to the brand name concept. Congress would have to approve the proposal, however.

Under questioning from subcommittee members Weinberger was vague about how the program would work, but emphasized that physicians would remain free to prescribe as they choose. Sen. Kennedy praised the proposal. Sen. Gaylord Nelson (D., Wis.) said the HEW recommendation "must be only the first step in a massive intrusion by the federal government into the prescribing habits of physicians."

The first day's session featured charges that drug companies are monopolistic, keep prices jacked high, and spend huge amounts on advertising. Physicians were described as inept and too generous prescribers of drugs influenced in-

ordinately by advertising and drug detail men. It was implied that 100 deaths a day due to drug reactions were the fault of the drug industry and the prescribing physicians.

Sen. Gaylord Nelson (D., Wis.), a subcommittee member, urged that prescription drug advertising be banned and trade names eliminated. Consumer advocate Ralph Nader agreed and recommended patent restriction.

In an opening statement, Kennedy said the hearings are designed to "search for legislative solutions to the problems surrounding the way drugs are developed, marketed and used in this country." He said "Too many physicians are prescribing too many drugs on the basis of too little information . . . such irrational prescribing is a product of physician ignorance, not malice . . ."

Kennedy's subcommittee had never before asserted broad jurisdiction in the drug field. The hearings were viewed as a stake-out to this aspect of health and government, and also as a bow to Nelson who has been investigating the drug industry for years and is its strongest critic on Capitol Hill. Nelson is a new member of the Kennedy subcommittee. His previous forum was a Senate small business subcommittee.

James H. Sammons, M.D., Chairman of the Board of the American Medical Association, told the subcommittee that in the heat of controversy it should be emphasized that "Today there are a large number of drug preparations available through a complex delivery system replete with checks and balances provided by industry, the Food and Drug Administration, physicians, pharmacists, and in some instances allied health personnel."

Dr. Sammons continued, "It is not surprising that this complex and important system carries with it complex problems that different groups within the system perceive differently . . . simple solutions for the management of our problems are not realistic."

The AMA official said the reduction in funding for research investigators could have an adverse effect on development of improved drugs. The complexity of FDA procedures "is becoming self-defeating and some new approaches are required if we are to be able to provide new and useful therapeutic agents to alleviate existing maladies."

Whatever is done, Dr. Sammons said, "the physician must be able to prescribe the drug in dosage and strength deemed appropriate for his patient . . ."

"Where appropriate, we believe the physician should prescribe the least expensive product, Dr. Sammons testified. "But the generic name on the bottle is not a guarantee of equivalence, nor for that matter does a generic prescription even guarantee to the patient that he will receive the least expensive product."

C. Joseph Stetler, President of the Pharmaceutical Manufacturers Association, testified that, "What the secretary is proposing represents an extraordinarily radical approach to health care, one which may give the appearance of providing first class medical care at less cost, but which will either require Medicare and Medicaid beneficiaries to accept inferior products or force them to pay the cost of first class medicines from their own household budgets."

Stetler said the proposal might have some merit if therapeutic equivalence of drugs could be assured, "but the published evidence is almost entirely on the other side. Reports of the clinical inequivalence of drugs sold under the same generic name are increasing as are quality control failures."

On another tact, Stetler said new drug discoveries have been a major contributor to improving health care, and that drug prices have held stable in a period of soaring inflation.

But, he warned, America is falling behind foreign competitors in the rate of pharmaceutical innovation, adding that the industry's pattern of discovery of new drugs and the stable prices of medicines are threatened by proposals to reduce incentives for drug producers to continue their massive research programs.

"Price setting, dilution of patent rights, or a government takeover of research and development or promotional activities," suggested by some, would be self-defeating and lead to higher prices and lower productivity, Stetler said.

Although the industry's dollar investment in research is continuing to climb, Stetler testified that fewer American pharmaceutical firms are sponsoring such activities due, in part, to the tangle of government delays and regulations.

In his slashing testimony, Sen. Nelson said the AMA "has cooperated in creating confusion"

and has been "disastrous in this field because the custodians of health care in this country are the guide to us on what good medical practice is." The AMA "has done more damage to the good practice of drug prescribing than if it did not exist at all," Nelson said. The AMA's drug manual was "degraded" due to pressure from drug companies . . . "For money! It is as simple as that," he asserted.

Nader accused the industry of "price gouging and causing serious harm to tens of thousands of people that is unparalleled in history."

The hearings will resume later this winter and continue through the summer.

* * *

The Administration has moved to set clear fuel priorities in the health field as Congress was warned by health leaders that emergency care, drugs and devices and hospital care could be severely affected unless sufficient fuel is made available this winter.

Immediately following a hastily scheduled one-day hearing before the Senate Health Subcommittee, William E. Simon, head of the Federal Energy Office, said the pharmaceutical industry will get all the fuel it needs for production and research in order to maintain adequate supplies of essential drugs and medical supplies.

A spokesman for the American Medical Association testified there is a critical need to make special provisions for an adequate supply of motor fuel to meet the needs of medicine. J. Cuthbert Owens, M.D., a member of the AMA's Commission on Emergency Medical Services, said, "Physicians, nurses, life support personnel, rescue workers, and ambulances and other emergency motor vehicles must have a sufficient and continuous supply of gasoline to insure the provision of prompt care for the ill and injured. In addition, adequate fuel must be available to health care institutions, as well as to suppliers of necessary medical equipment and supplies."

Leo J. Gehrig, M.D., Vice President of the American Hospital Association, said there is no federal natural gas allocation program for health care institutions.

"This substantial area of potential energy shortages significantly magnifies the effect of shortages of other fossil fuels on hospitals," Dr. Gehrig told the subcommittee. The proposed

regulations published on December 13, 1973, providing for mandatory allocation of middle distillates, allow hospitals only 100% of their 1972 base period volume, he pointed out. "With increasing natural gas interruptions there is need for hospitals to receive 100% of current fuel requirements," Dr. Gehrig said.

"The hospitals of this country must be provided the priority and supply of energy sources to permit them to deliver vital services to patients," Gehrig said.

* * *

ARKANSAS FOUNDATION FOR MEDICAL CARE

At a meeting in Little Rock on November 25, 1973, the Arkansas Foundation for Medical Care voted to amend its By-Laws. The revised By-Laws as adopted by the Foundation are as follows:

BY-LAWS of

ARKANSAS FOUNDATION FOR MEDICAL CARE

We, the Directors of the above entitled corporation, under the Arkansas Non-Profit Corporation Act, hereby adopt the following By-Laws for the government of said corporation, the regulation of its affairs, and the carrying on of its business.

ARTICLE I Membership

1. Classes of Membership:

There shall be one class of membership in this corporation. In addition to the members referred to above, the Board of Directors may designate other persons who may take part in the projects to be carried out under the direction or control of the corporation, under such terms and conditions as the Board of Directors may determine.

2. Qualifications of Members:

Any physician, who is authorized by the statutes of the State of Arkansas to practice medicine or osteopathy in the State of Arkansas shall be eligible to apply for election as a Member in this corporation; provided, however, that the Board of Directors of this corporation shall have the right to refuse such application for membership, if in their sole discretion, they shall find that such physician shall not be of good moral character or in any other way be not qualified to practice medicine or osteopathy, or to have been guilty of unprofessional conduct or of con-

duct unbecoming a person licensed to practice medicine or osteopathy, or of conduct detrimental to the best interest of the public.

3. Selection and Removal of Members:

Any physician who desires to become a Member of the corporation shall complete and file such application for that purpose as may be required by the Board of Directors. Such application shall contain a provision whereby the applicant agrees to be bound by the By-Laws of the corporation and such rules and regulations as may be adopted by the corporation and agrees to be bound by the principles of medical ethics, as adopted by the Board of Directors. The Board of Directors of the corporation shall have the right to reprimand or to cancel or suspend from membership any Member who has been found by the Board of Directors to be guilty of violation of the By-Laws or rules and regulations of this corporation or of said principles of medical ethics, or not be of good moral character or in any other way not qualified to practice medicine, or to have been guilty of unprofessional conduct or of conduct unbecoming a person licensed to practice medicine, or of conduct detrimental to the best interest of the public.

The Board of Directors shall be authorized to adopt such rules and regulations as it may deem reasonable for the processing of applications for Membership, and for the discipline of Members.

4. Rights, Privileges and Obligations of Members:

The Board of Directors may adopt such rules and regulations as it may deem proper, not inconsistent with these By-Laws, governing the rights, privileges and obligations of Members.

The privilege of being heard at the meetings of the Board of Directors shall be granted to Members subject to such limitations as the Board of Directors may determine.

5. Dues and Assessments:

Dues and Assessments, if any, to be charged to or imposed upon the Members of the corporation or other persons who may take part in any project of the corporation shall be determined by the Board of Directors.

6. Voting Rights:

A member shall be entitled to one vote on all propositions submitted to the members.

A member shall be entitled to vote by proxy

and such proxies shall be counted in determining a quorum at all meetings.

7. Interest in Property:

None of the members of this corporation shall ever have any right to or interest in any of the property, real or personal of any kind or description, which is now or may in the future be owned and controlled by the corporation.

ARTICLE II

Meetings of the Members

1. Annual Meetings:

The annual meeting of members of this corporation shall be held on the first day or the last day of the annual session of the Arkansas Medical Society.

2. Special Meetings:

A special meeting of the Members of this corporation may be called at any time by the President, the Board of Directors, or by not less than one-third of such Members.

3. Place of Meeting:

Each annual meeting of the Members of the corporation shall be held at the same place designated as the place of meeting for the annual session for such year of the Arkansas Medical Society. The Board of Directors may designate any place, either within or without the State of Arkansas, as a place of meeting for any special meeting called by the Board of Directors. If no designation is made, or if a special meeting be otherwise called, the place of meeting shall be the registered office of the corporation in the State of Arkansas.

4. Notice of Meeting:

Written notice stating the place, day and hour of any special meeting of Members shall be delivered either personally or by mail, to each member, not less than 10 nor more than 50 days before the date of such meeting, by or at the direction of the President, or the Secretary, or the officers or persons calling the meeting. The purpose or purposes for which the special meeting is called shall be stated in the notice. If mailed, the notice of meeting shall be deemed to be delivered when deposited in the United States mail addressed to such member at his address as it appears on the records of the corporation, with postage thereon prepaid.

5. Informal Action by Members:

Any action required by law to be taken at a meeting of the members, or any action which

may be taken at a meeting of such members, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of such members entitled to vote with respect to the subject matter thereof.

6. Quorum:

Thirty percent of the membership shall constitute a quorum at any such meeting. If a quorum is not present at the meeting, a majority of the members present may adjourn the meeting from time to time without further notice.

7. Voting:

A majority of the members present at a meeting at which a quorum is present shall be necessary for the adoption of any matter to be voted upon by such members, unless a greater percentage is required by law or by these By-Laws.

ARTICLE III

Board of Directors

1. General Powers:

The affairs of this corporation shall be managed by its Board of Directors.

2. Number, Tenure, and Qualifications:

The Board of Directors shall be composed of 20 members who shall be elected by the members of this corporation residing in the respective director district. There shall be 10 director districts which shall have the same geographical area as the 10 councilor districts of the Arkansas Medical Society.

At the first meeting of the members of this corporation after the adoption of this provision of the By-Laws of this corporation two directors of the corporation shall be selected from each of the 10 districts comprising the State of Arkansas. One director from each district shall be elected for one year and one director shall be elected for two years, thereafter at the annual meeting of the members of the corporation one director shall be elected to succeed the retiring director. Terms of the directors shall be a period of two years. Directors can be elected to succeed themselves. In the event of the retirement of a director by resignation, death, or otherwise the remaining directors shall elect a succeeding director from other physicians of the district from which the retiring director came, who shall serve until the next annual meeting of the members of this corporation. It shall not be necessary or a requirement for

office that any director be a member of any medical society or dues paying organization.

3. Regular Meetings:

The regular annual meeting of the Board of Directors shall be held without other notice than this By-Law, immediately after, and at the same place as the annual meeting of the Members of the corporation. The Board of Directors may provide by resolution the time and place, either within or without the State of Arkansas, for the holding of additional regular meetings of the Board without other notices than such resolution.

4. Special Meetings:

Special meetings of the Board of Directors may be called by or at the request of the President or any two Directors. The person or persons authorized to call special meetings of the Board may fix any place, either within or without the State of Arkansas, as the place for holding any such special meeting of the Board called by them.

5. Notice:

Notice of any special meeting of the Board of Directors shall be given at least two days previously thereto by written notice delivered personally or sent by mail or telegram to each Director at his address as shown by the records of the corporation. If mailed, such notice shall be deemed to be delivered when deposited in the United States mail in a sealed envelope so addressed, with postage thereon prepaid. If notice be given by telegram, such notice shall be deemed to be delivered when the telegram is delivered to the telegraph company. The attendance of a Director at any meeting shall constitute a waiver of notice of such meeting, except where a Director attends a meeting for the express purpose of objecting to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the Board need be specified in the notice or waiver of notice of such meeting, unless specifically required by law or by these By-Laws.

6. Quorum:

A majority of the Board of Directors shall constitute a quorum for the transaction of business at any meeting of the Board; but if less than a majority of the Directors are present

at said meeting, a majority of the Directors present may adjourn the meeting from time to time without further notice.

7. Voting:

The act of a majority of the Directors present at a meeting at which a quorum is present shall be the act of the Board of Directors, unless the act of a greater number is required by law or by these By-Laws.

8. Vacancies:

Any vacancy occurring in the Board of Directors and any directorship to be filled by reason of an increase in the number of directors shall be filled by election by the Board of Directors. A director elected to fill a vacancy shall be elected for the unexpired term of his predecessor in office.

9. Compensation:

Directors as such shall not receive any stated salaries for their services, but by resolution of the Board of Directors reasonable compensation and expenses of attendance, if any, may be allowed for attendance at regular or special meetings of the Board; but nothing herein contained shall be construed to preclude any Director from serving the corporation in any other capacity and receiving compensation therefor.

10. Informal Action by Directors:

Any action required by law to be taken at a meeting of Directors, or any action which may be taken at a meeting of Directors, may be taken without a meeting if a consent in writing, setting forth the action so taken, shall be signed by all of the Directors.

11. Removal of Directors:

Any Director may be removed at any time, with or without cause, by a majority vote of the members at any annual meeting of the members or at any special meeting of the members called expressly for that purpose.

ARTICLE IV

Advisory Council

There shall be an advisory council, whose purpose shall be to advise and counsel with the officers and directors of this corporation on any matters which may be of proper concern or interest to the corporation. This council may include but need not be limited to persons from various organizations or groups who are especially involved or interested, either as providers or consumers, in the field of health care, in the

State of Arkansas, and also other persons who, by reason of training and experience, may be qualified to provide valuable advice and assistance to the work of the corporation. The members of this council shall be elected by the Board of Directors, at the regular annual meeting of the Board of Directors, and shall serve for terms of one year, or until their successors shall have been duly elected and qualified. The number of the members of the advisory council shall be established by the Board of Directors.

ARTICLE V

Officers

1. Officers:

The officers of the corporation shall be a President, who shall also serve as Chairman of the Board of Directors, a Vice-Chairman of the Board of Directors, an Executive Vice-President, a Senior Vice-President, one or more other Vice-Presidents, a Secretary, a Treasurer, and such other officers as may be elected in accordance with the provisions of this Article. The relative rank and authority of the three classifications of Vice-President shall be in the order in which they are named above. The Board of Directors may elect or appoint such other officers, including one or more assistant secretaries, one or more assistant treasurers, one or more project directors, and such other administrative officers as it may deem desirable, such other officers to have the authority and perform the duties prescribed from time to time by the Board of Directors. Any two or more offices may be held by the same person, except the offices of President and Secretary.

2. Election and Term of Office:

The officers of the corporation shall be elected annually by the Board of Directors at the regular annual meeting of the Board of Directors. If the election of officers shall not be held at such meeting, such election shall be held as soon thereafter as conveniently may be. New offices may be created and filled at any meeting of the Board of Directors. Each officer shall hold office until his successor shall have been duly elected and qualified.

3. Removal:

Any officer elected or appointed by the Board of Directors may be removed at any time, with or without cause, by the Board of Directors whenever in its judgment the best interests of

the corporation would be served thereby, but such removal shall be without prejudice to the contract rights, if any, of the officer so removed.

4. Vacancies:

Any vacancy in any office because of death, resignation, removal, disqualification or otherwise, may be filled by the Board of Directors for the unexpired portion of the term.

5. President:

The President shall be the executive head of the corporation, and shall have general supervision over the business and affairs of the corporation. He shall preside at all meetings of the members and of the Board of Directors.

6. Vice-Chairman of the Board of Directors:

The Vice-Chairman of the Board of Directors shall be elected by the Board of Directors from those persons duly elected to and serving on the Board of Directors; and he may continue in this office only as long as he serves as a member of the Board of Directors. In the absence of the President or in the event of his inability or refusal to act, the Vice-Chairman of the Board shall perform the duties of the President, and when so acting shall have all the powers of and be subject to all the restrictions upon the President. The Vice-Chairman of the Board shall perform such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

7. Treasurer:

If required by the Board of Directors, the Treasurer shall give a bond for the faithful discharge of his duties in such sum and with such surety or sureties as the Board of Directors shall determine. He shall have charge and custody of and be responsible for all funds and securities of the corporation; receive and give receipts for moneys due and payable to the corporation from any source whatsoever, and deposit all such moneys in the name of the corporation in such banks, trust companies or other depositories as shall be selected in accordance with the provisions of these By-Laws; and in general perform all the duties incident to the office of Treasurer and such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

8. Secretary:

The Secretary shall keep the minutes of the

meetings of the members and of the Board of Directors in one or more books provided for that purpose; see that all notices are duly given in accordance with the provisions of these By-Laws or as required by law; be custodian of the corporate records and of the seal of the corporation and see that the seal of the corporation is affixed to all documents, the execution of which on behalf of the corporation under its seal is duly authorized in accordance with the provisions of these By-Laws; keep a register of the post office address of each member which shall be furnished to the Secretary by such member; and in general perform all duties incident to the office of Secretary and such other duties as from time to time may be assigned to him by the President or by the Board of Directors.

9. Executive Vice-President:

The office of Executive Vice-President shall be filled by the person who holds the office of Executive Vice-President (or such other title as may hereafter be given to that office) of the Arkansas Medical Society. Subject to the control of the President and of the Board of Directors, he shall in general direct and supervise the administration of the business and affairs of the corporation.

10. Senior Vice-President:

The Senior Vice-President shall, subject to the direction and control of the President, the Board of Directors, and the Executive Vice-President, be responsible for the administration and supervision of the business and affairs of the corporation.

11. Other Vice-Presidents:

The other Vice-Presidents shall perform such duties as from time to time may be assigned to them by the President, the Board of Directors, the Executive Vice-President, or the Senior Vice-President.

12. Project Directors:

Any Project Directors shall serve under the general supervision and direction of his superior officers. He shall supervise the administration of such projects as may be assigned to him, and shall perform such other duties as may be delegated to him by the Board of Directors, the President, or his other superior officers.

13. Assistant Treasurers and Assistant Secretaries:

If required by the Board of Directors, the As-

sistant Treasurers shall give bonds for the faithful discharge of their duties in such sums and with such sureties as the Board of Directors shall determine. The Assistant Treasurers and Assistant Secretaries, in general, shall perform such duties as shall be assigned to them by the Treasurer or the Secretary or by the President or the Board of Directors.

ARTICLE VI

Committees

1. Committees of Directors:

There shall be an Executive Committee, which shall include the President, and such other officers or members of the Board of Directors as may be designated by the Board of Directors. The Board of Directors may delegate to such Executive Committee any of the powers of the Board of Directors when the Board of Directors is not in session; provided, however, that such delegation of authority to the Executive Committee shall not operate to relieve the Board of Directors, or any individual Director, of any responsibility imposed upon it or him by law.

2. Other Committees:

Other committees not having and exercising the authority of the Board of Directors in the management of the corporation may be appointed in any such manner as may be designated by a resolution adopted by a majority of the Directors present at a meeting at which a quorum is present. Unless otherwise provided in such resolution, members of such committees may be persons who are not members of the Board of Directors.

3. Term of Office:

The tenure of members of such committees shall be as provided by the Board of Directors in the resolution creating such committees.

4. Quorum:

Unless otherwise provided in the resolution of the Board of Directors designating a committee, a majority of the whole committee shall constitute a quorum and the act of a majority of the members present at a meeting at which a quorum is present shall be the act of the committee.

5. Rules:

Each committee may adopt rules for its own government not inconsistent with these By-laws or with rules adopted by the Board of Directors.

ARTICLE VII

Execution of Instruments

1. Execution of Instruments:

The President shall have power to execute on behalf and in the name of the corporation any deed, contract, bond, debenture, note or other obligations or evidences of indebtedness, or proxy, or other instrument requiring the signature of an officer of the corporation, except where the signing and execution thereof shall be expressly delegated by the Board of Directors to some other officer or agent of the corporation. Unless so authorized, no officer, agent or employee shall have any power or authority to bind the corporation in any way, to pledge its credit, or to render it liable pecuniarily for any purpose or in any amount.

2. Checks and Endorsements:

All checks and drafts upon the funds to the credit of the corporation in any of its depositories shall be signed by such of its officers or agents as shall from time to time be determined by resolution of the Board of Directors which may provide for the use of facsimile signatures under specified conditions, and all notes, bills receivable, trade acceptances, drafts, and other evidences of indebtedness payable to the corporation shall, for the purpose of deposit, discount or collection, be endorsed by such officers or agents of the corporation or in such manner as shall from time to time be determined by resolution of the Board of Directors. In the absence of such determination by the Board of Directors, such instruments shall be signed by the Treasurer or an Assistant Treasurer and counter-signed by the President or a Vice-President of the corporation.

3. Deposits:

All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies or other depositories as the Board of Directors may select.

4. Gifts:

The Board of Directors may accept on behalf of the corporation any contribution, gift, bequest or devise for the general purposes or for any special purpose of the corporation.

ARTICLE VIII

Books and Records

The corporation shall keep correct and complete books and records of account and shall also

keep minutes of the proceedings of its members, Board of Directors and committees having any of the authority of the Board of Directors, and shall keep at its registered or principal office a record giving the names and addresses of the members entitled to vote. All books and records of the corporation may be inspected by any members for any proper purpose at any reasonable time.

ARTICLE IX

Fiscal Year

The fiscal year of the corporation shall begin on the first day of January, and end on the last day of December in each year.

ARTICLE X

Corporate Seal

The corporate seal shall be in such form as shall be approved by resolution of the Board of Directors. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise. The impression of the seal may be made and attested by either the Secretary or an Assistant Secretary for the authentication of contracts or other papers requiring the seal.

ARTICLE XI

Waiver of Notice

Whenever any notice is required to be given to any member or director of this corporation under the provisions of the Arkansas Non-Profit Corporation Act or under the provisions of the Articles of Incorporation or by the By-Laws of the corporation, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

ARTICLE XII

Amendments to By-Laws

These By-Laws may be amended at any annual meeting of the Members, or at any special meeting of the Members called for that purpose. These By-Laws may also be amended by the Board of Directors, by a vote of two-thirds of the total number of such Directors: provided, however, that the Directors shall not have the right to change or repeal any amendment hereto adopted by the Members. The Members shall have the right to amend or repeal any By-Law change made by the Board of Directors.



PERSONAL AND NEWS ITEMS

Doctor Presents Paper

Dr. James J. Pappas attended a meeting of the Southern Section, American Laryngological, Rhinological and Otological Society, Inc., on January 11-12, 1974, and presented a paper entitled "Middle Ear Ventilation Tubes."

Physicians Appointed to National Groups

Four physicians from the Arkansas Chapter of the American Academy of Family Physicians have been named to serve on national groups of the American Academy of Family Physicians. They are: Dr. Guy U. Robinson of Dumas, Commission on Membership and Credentials; Dr. Thomas D. Honeycutt of Little Rock, Committee on Members' AAFP Insurance and Financial Services; Dr. W. I. Wade of Little Rock, Committee on Cancer; and Dr. Amail Chudy of North Little Rock, Committee on Mental Health.

Health Education Center Director Named

The University of Arkansas Medical Center has announced the appointment of Dr. J. Campbell Gilliland, a Fort Smith cardiologist, as director of the Area Health Education Center located in Fort Smith.

The 1973 General Assembly authorized and funded a program to extend the Medical Center into certain communities in the State. It is hoped the program will promote the education of primary care physicians and encourage young health professionals to practice in less densely populated areas of the State.

In addition to Fort Smith, funds have been released for Centers at El Dorado and Pine Bluff.

Physician Injured

Dr. William Webb, in family practice at Decatur, was seriously injured in a three-vehicle auto accident January 16th and was hospitalized at St. John's Hospital in Tulsa, Oklahoma. Dr. Webb's wife and daughter were also seriously injured and hospitalized.

Physician Relocates

Dr. Louis R. Munos has joined the staff of the Newport Hospital and Clinic and will en-

gage in the general practice of medicine. Dr. Munos was the medical director of Elcare, Inc., at Bella Vista. While serving as director, he established two full-service medical clinics in retirement villages at Cherokee Village.

Physicians Honored

The physicians of Osceola were honored at the local Kiwanis Club recently. Each doctor received a wall plaque in appreciation of his humanitarian services to the community of Osceola and the surrounding area. Doctors honored included Drs. L. D. Massey, Frank Rhodes, Eldon Fairley, Julian Fairley, George Pollock, and Sumner R. Cullom.

New One-man Clinic Planned

Dr. Dennis O. Davidson of Conway plans to move into his new clinic site at Caldwell and Faulkner streets soon. The facility will include upper-level living quarters and an emergency-room-type entrance, in addition to the examining rooms.

Orthopaedic Letters Club Honors Founder

Dr. William Knight of Fort Smith was honored with the presentation of a large silver tray for his services as founder and director of the International Orthopaedic Letters Club. The 25th annual meeting of the club was held in Dallas in January, along with the American Academy of Orthopaedic Surgeons' meeting. Mrs. Knight was presented with a gold bracelet and Dr. Knight also received a leather bound volume of letters of appreciation written by fifty-six members of the club.

Dr. Henker Appointed

Dr. Fred O. Henker, III, of Little Rock, was appointed as a regional representative for the Southern area of the United States at a recent meeting of the Academy of Psychosomatic Medicine.

Dr. Henker will represent the Academy at postgraduate medical meetings as well as serve as a regional ambassador.

Eureka Springs Gets Physician

Dr. Hunter M. Steadman, Jr., presently in family practice residency in Denver, Colorado,

will be entering practice in Eureka Springs in July. He is a 1968 graduate of the University of Tennessee College of Medicine. Dr. Steadman's original contact with the community of Eureka Springs was a result of the Medical Society's Physician Placement Service.

Physicians Locate

Dr. Jorge H. Johnson has recently opened his office in Fayetteville for the practice of neurosurgery. Dr. Johnson is a graduate of the Kansas University Medical School and a native of Chicago, Illinois.

Dr. James D. Martin has announced his affiliation with Dr. John W. Vinzant of Fayetteville in the practice of family medicine. Dr. Martin is a native of Harrison, Arkansas, and a graduate of the University of Arkansas School of Medicine.

Dr. James O. Turbeville, who has been associated with Dr. John H. Wesson in family practice in Nashville, Arkansas, has announced that he will relocate his practice in Murfreesboro.

Dr. Robert R. Sykes, a 1966 graduate of the University of Arkansas School of Medicine, will begin the practice of family medicine in Nashville in June 1974 upon completion of his military obligation.

Dr. William Dale Morris, a 1965 graduate of the University of Arkansas School of Medicine and currently in surgery residency there, will begin practice in Nashville in December 1974.

Health Careers School Opens

The Health Careers Vocational Institute, located in Little Rock, began offering training courses for paramedical personnel in February. The institute, which is licensed by the Arkansas State Department of Education, offers courses for Medical Office Receptionist, Nursing Aide, and Medical Transcriptionist.

New Clinic In Ozark Planned

Plans for the construction of a proposed four-doctor medical clinic in Ozark are well under way. Dr. Rebecca Flowers of Ozark, and Drs. Dick Ewing and Roland Reynolds of Little Rock, who plan to practice in Ozark, have selected a clinic site and expect to begin construction as soon as architectural plans are finalized. Tentative plans call for 8,000 square feet of floor space in a steel and concrete block structure,

faced with native stone. Dr. Ewing and Dr. Reynolds are scheduled to complete their training at the Baptist Medical Center in Little Rock in July of 1974.



Dr. Brooks R. Teeter

Dr. Brooks R. Teeter of Russellville died January 1, 1974, at the age of 64. He was born February 1, 1909, in Pottsville.

Dr. Teeter attended Arkansas Polytechnic College, Hendrix College, and the University of Arkansas in Fayetteville. He graduated from the University of Arkansas School of Medicine in 1937.

He was a member of the Pope County Medical Society, the Arkansas Medical Society and the American Medical Association.

Dr. Teeter is survived by his widow, Mrs. Crystelle Owens Teeter, two sons and two daughters.

ANSWER—Electrocardiogram of the Month

Atrial rate = 82/min—foaled you didn't it—look carefully for the extra P waves in the QRS-St junction.

Ventricular rate = 42/min

PR interval = variable

QRS duration = 0.16

The QRS configuration is that of right bundle branch block with marked S-waves in lead I, suggesting additional Posterior Fascicular (hemi) Block. You might also consider the marked left, or really superior axis rotation indicative of Anterior Fascicular Block—but then you've bumped off all three fascicles. Under those circumstances, how would the impulse get through from the atrio to the ventricles at all? Good question! Most of the time they don't. Only rarely—the 4th beat in lead I, the 3rd beat in V-5, and the last beat in AVF—is there capture of the ventricles by the atria. This then is an example of severe A-V block. You can call it severe second degree block, but I'd call it 3rd degree heart block with occasional capture beats. The P waves in V1 are BIG, and this is compatible with left atrial enlargement. Ventricular repolarization is bizarre (ST-T waves) but that's probably all secondary to bizarre depolarization.

THINGS TO COME



The Institute for the Medical Humanities of the University of Texas Medical Branch at Galveston is pleased to announce that the First Trans-Disciplinary Symposium on the Interface of Philosophy and Medicine, "Evaluation and Explanation in the Biomedical Sciences," will convene May 9-11, 1974. The program, composed of six sessions, will include as principal speakers: Chester R. Burns (UTMB), H. Tristram Engelhardt, Jr. (UTMB), Lester King (Chicago), Alasdair MacIntyre (Boston U), S. F. Spicker (Connecticut), Stephen Toulmin (Chicago), Marx Wartofsky (Boston U), and Richard Zaner (Southern Methodist). Program announcements and additional information may be obtained from H. Tristram Engelhardt, Jr., UTMB, Galveston, Texas 77550.

Family Practice Certification Exams Set

The American Board of Family Practice will give its next two-day written certification examinations October 19-20, 1974. Locations will be five centers geographically distributed throughout the United States. For further information write: Nicholas J. Pisacano, M.D., Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Annex #2, Room 229, Lexington, Kentucky 40506.

Completed applications must be filed no later than *June 15, 1974*.

International Surgical Meeting

The Third World Congress of the Collegium International Chirurgiae Digestivae, will hold a meeting in Chicago, Illinois, October 10-14, 1974, at the Regency Hyatt Chicago Hotel. For further information contact: Secretariat: University of Illinois, Department of Surgery, P.O. Box 6998, Chicago, Illinois 60680.

Cancer Society Education Conferences

The American Cancer Society, Inc. has scheduled the following educational conferences that will be acceptable for Credit Hours in Category I for the Physician's Recognition Award of the American Medical Association and for Elective Hours by the American Academy of Family Physicians:

American Cancer Society's National Conference on Advances in Detection and Diagnosis of Cancer — May 1-3, 1975, The Denver Hilton, Denver, Colorado.

American Cancer Society's National Conference on Gynecologic Cancer — September 18-20, 1975, Marriott Hotel, Philadelphia, Pennsylvania.

Eighth National Cancer Conference — September 20-22, 1976, Regency Hyatt Hotel, Atlanta, Georgia. Sponsored by the American Cancer Society and the National Cancer Institute.

Details regarding specific hours of accreditation and registration will be provided at a later date.

Clinical Immunology and Allergy Meeting

The American Association for Clinical Immunology and Allergy will hold its annual meeting November 21-24, 1974, at Pier 66, Fort Lauderdale, Florida. Direct inquiries to the Program Chairman, John L. Dewey, M.D., President-elect, American Association for Clinical Immunology and Allergy, Post Office Box 912, DTS, Omaha, Nebraska 68101.

Non-Narcotic Drug Abuse Symposium

The Institute of Clinical Toxicology is sponsoring a symposium entitled "Clinical Aspects of Non-Narcotic Drug Abuse". The symposium will be held at the Marriott Motor Hotel in Houston, Texas, May 20-23, 1974. For further information write: Eric G. Comstock, M.D., Director, Institute of Clinical Toxicology, P.O. Box 2565, Houston, Texas 77001.



Woman's
Auxiliary

REGIONAL MEETINGS

The Woman's Auxiliary to the Arkansas Medical Society recently conducted schools of information in two regions of the state.

The Southwest Region of the Auxiliary held the first school in Arkadelphia. The ladies of the Clark County Medical Society Auxiliary hosted the meeting. Arrangements were made by Mrs. Eli Gary, Clark County President; Mrs. Wallis A. Ross, State Auxiliary Secretary; Mrs.

Kenneth Duzan, Regional Vice President, and Mrs. Lynn Harris.

Mrs. A. S. Koenig, State Auxiliary President, updated the members on the activities of the State Auxiliary, including Project Compassion, a nursing home visitation program, and the Auxiliary's role in the collection and donation of funds to the American Medical Association's Education Research Fund.

Mr. Bob Waters, Executive Director of the Arkansas Council for Health Careers, explained the functions of that organization. The Council has recently published its first Health Resources catalog. This book lists all schools, hospitals, and institutions of higher learning in Arkansas that offer courses in allied health careers. These books are now being made available to high schools in the State by each county medical society auxiliary.

The Southeast Region of the Auxiliary met in Pine Bluff. Mrs. George Roberson, President-elect of the State Auxiliary, and other members of the Jefferson County Medical Society Auxiliary hosted the second school of information. Mrs. Koenig and Mr. Waters each addressed the members on the roles of the State Auxiliary and the Council for Health Careers. Mrs. Koenig presented additional information on care for emotionally disturbed teenagers and activities of the American Cancer Society, Arkansas Division, in which the Auxiliary has participated. The Auxiliary is becoming involved with the "Reach for Recovery" program for mastectomy patients. Members of the Auxiliary also participated as volunteers in a recent pap smear campaign in Crawford County conducted by the Cancer Society. This pilot program proved to be a much needed service to the women in the more rural areas who are unable to see physicians on a regular basis for pap smears. A second pap smear program is now being planned for the Jefferson County area and it is anticipated that it will be followed by programs held over the entire State.

CRITTENDEN COUNTY ORGANIZED

The Crittenden County Medical Society Auxiliary held an organizational meeting recently in West Memphis. Officers were elected and Mrs. W. J. Wright of Earle was selected as the President.

Mrs. A. S. Koenig, President of the State Woman's Auxiliary of the Arkansas Medical Society, presented a program on the current work of the Auxiliary. Mrs. Koenig explained the various Auxiliary programs, including Health Manpower, the Arkansas Council for Health Careers, Health Services, Health Education, Legislation and Project Compassion, and their nursing home visitation program.



Dr. R. Jerry Mann

Dr. R. Jerry Mann is a new member of the Clark County Medical Society. He is a native of El Dorado, Arkansas.

Dr. Mann attended Hendrix College in Conway and received his B.A. in 1962. He attended the University of Arkansas graduate school in 1962 and 1963. Dr. Mann was graduated from the University of Arkansas School of Medicine in 1967. He served in the United States Navy from 1967 to 1973. His internship was taken at the U. S. Naval Hospital in Portsmouth, Virginia, and his residency in Family Practice was completed at the United States Naval Hospital in Jacksonville, Florida, in 1970. Dr. Mann was stationed in Taipei, Taiwan, from 1970 to 1972 and at the Memphis Naval Hospital from 1972 to 1973. He entered into Family Practice in Arkadelphia in 1973.

Dr. Mann is a member of the American Academy of Family Physicians and the Southern Medical Association.

Dr. Amal N. Olaimey

The Monroe County Medical Society has accepted for membership Dr. A. N. Olaimey. Dr.

Olaimy is from Nazareth, Palestine.

Dr. Olaimy received his B.S. degree from Ouachita University at Arkadelphia in 1961, and his M.S. degree from the University of Arkansas in 1965. He graduated from the University of Arkansas School of Medicine in 1971, and completed his internship at the University of Arkansas Medical Center in Little Rock.

Dr. Olaimy has been in General Practice in Brinkley for the past one and one-half years.

Dr. Ted S. Lancaster

Dr. Ted S. Lancaster has been accepted for membership in the Lawrence County Medical Society. Dr. Lancaster is a native of Qulin, Missouri. He is a 1966 graduate of Little Rock University. In 1970 he was graduated from the University of Arkansas School of Medicine. His internship was completed at Arkansas Baptist Medical Center in Little Rock. Dr. Lancaster served in the United States Air Force from 1971 until 1973.

He is in the general practice of medicine at 415 Southwest Third Street in Walnut Ridge.

Dr. William C. McBryde

Dr. William C. McBryde has been accepted for courtesy membership in the Pulaski County Medical Society. Dr. McBryde, a native of Pine Bluff, Arkansas, is a graduate of the University of Arkansas School of Medicine and is currently an intern at St. Vincent Infirmary in Little Rock.

Dr. Hyman Harberg

Dr. Hyman Harberg has been accepted for membership in the Woodruff County Medical Society. He is a native of Alexandria, Virginia. Dr. Harberg received his M.D. degree from the George Washington University School of Medicine, St. Louis, Missouri, in 1926. His internship was completed at Mount Sinai Hospital in Philadelphia, Pennsylvania.

Dr. Harberg has practiced medicine in Arkansas since 1949, where he practiced family medicine in Jonesboro until 1957. He practiced at the Veterans Hospital in Little Rock from 1957 until 1970, and is now in family practice at Cotton Plant, Arkansas.



In 1974
THE
ARKANSAS MEDICAL SOCIETY
will hold its
ANNUAL MEETING
at the new

Little Rock Convention Center

the program committee
is arranging a series of
lectures of current interest
to practicing physicians

Make Your Plans to Attend!

April 28 - May 1, 1974
CAMELOT INN
LITTLE ROCK
CONVENTION CENTER

Digest Of Events

REGISTRATION

The registration desk will be located and open for registration as follows:
Sunday, April 28 Mezzanine of the Camelot Inn 8:00 A.M. to 5:00 P.M.
Monday, April 29 Exhibit Hall Entrance 8:00 A.M. to 5:00 P.M.
Tuesday, April 30 Exhibit Hall Entrance 8:00 A.M. to 5:00 P.M.
Wednesday, May 1 Mezzanine of the Camelot Inn 8:00 A.M. to 12:00 Noon

Registration cards and badges will be prepared in advance for the officers of the Arkansas Medical Society and for the county society delegates. Delegates are requested to present credentials in proper form when registering.

All members and visitors are required to register, as admission to all sessions will be by badge only. Bring your 1974 membership card to facilitate registration.

There will be a \$5.00 registration fee for non-member physicians.

Tickets for the Tuesday night banquet may be purchased at the registration desk.

TELEPHONE SERVICE

As a convenience to physicians in attendance at the meeting, arrangements have been made for telephone service at the Society convention registration desk. It is suggested that you give the following information to your office personnel so that you may be contacted in case of an emergency.

On Sunday and Wednesday, the Society staff may be reached through the Camelot Inn switchboard 372-4371. Calls should be directed to the Medical Society convention registration desk.

Monday and Tuesday, the number for the Society staff will be 372-5716.

MEETINGS OF THE COUNCIL

The Council of the Arkansas Medical Society will meet as follows:

Sunday, April 28 10:00 A.M.
Monday, April 29 7:30 A.M.
Tuesday, April 30 7:30 A.M.
Wednesday, May 1 9:00 A.M.
Wednesday, May 1 Immediately following the adjournment of the House of Delegates (Brief re-organization meeting and group photograph of new officers)

The voting members of the Council are: the councilors, the president, the first vice president, president-elect, secretary and treasurer. The speaker, vice speaker, and past presidents are members ex-officio without vote.

HOUSE OF DELEGATES

The opening session of the House of Delegates of the Arkansas Medical Society will be called to order at 1:00 P.M. on Sunday, April 28, in the Golden Knight room of the Camelot Inn.

The closing session and election of officers will begin at 10:00 A.M. on Wednesday, May 1, in the same room.

All items of business will be referred by the Speaker of the House of Delegates to three reference committees. Open hearings on all resolutions and reports will begin at 3:30 P.M. on Sunday, April 28. Any member of the Arkansas Medical Society is welcome to attend the meetings of the reference committees and to express views on the various reports, resolutions, etc. After

the open hearings, the reference committees will go into executive session for the purpose of preparing reports and recommendations to the House of Delegates.

All items of business to be considered by the House must either be printed in the March issue of the Journal or submitted to the headquarters office in writing twenty days prior to the meeting. Any new business proposed during sessions of the House must have two-thirds vote of attending delegates for introduction.

SCIENTIFIC SESSIONS

The scientific program of the annual meeting will be presented on Monday and until noon on Tuesday. Distinguished speakers from various medical centers across the Nation will present lectures. All convention visitors enter the lecture hall through the exhibit area.

Section and specialty group meetings will be held on Tuesday afternoon. The Association of Tumor Clinic Staff Members in Arkansas will hold a luncheon meeting on Monday, April 28, and the Alan Cazort Allergy Society of Arkansas will meet for a Monday luncheon.

The complete program for the annual meeting begins on page 352.

TECHNICAL AND SCIENTIFIC EXHIBITS

Forty-five displays by firms whose products and services are of interest to Arkansas physicians will be housed in the exhibition hall of the Robinson Auditorium. In addition, there will be scientific and industrial exhibits in the adjacent area.

A complete list of the scientific and technical exhibits appears on pages 359 to 362. Exhibit hours are from 8:00 A.M. to 5:00 P.M. on Monday and Tuesday.

FREE COFFEE

The Arkansas State Medical Assistants Society will serve coffee in the exhibit area. Members are urged to visit the medical assistants for a cup of coffee and discussion of the medical assistants' organization.

GOLF TOURNAMENT

The annual golf tournament in connection with the convention will be played Monday and Tuesday, April 29 and 30, at the Little Rock Country Club. Play must be finished by 5:00 P.M. Tuesday. There will be a \$10.00 charge per entry (includes greens fee) which may be paid at the club. Scores will be determined by the Calaway System and prizes will be awarded. Those wishing to participate in the tournament should see Junior Lewis, golf pro at the Little Rock Country Club.

SUNDAY EVENING RECEPTION

The Council will host a reception for all members, wives, and guests of the Arkansas Medical Society at 6:30 P.M. on Sunday, April 28, in the Camelot Inn. All members are encouraged to attend and become better acquainted with the officers of the Society.

SENIOR MEDICAL STUDENT DAY AT THE ANNUAL SESSION

Senior medical students will be invited to attend the Scientific Session on Monday, April 29.

A 12:00 noon luncheon, to be hosted by the Arkansas Medical Society, is planned for the students that day.

MEDICINE AND RELIGION COMMITTEE PRAYER BREAKFAST

The Society's Committee on Medicine and Religion will have a prayer breakfast at 7:00 A.M. on Monday, April 29. The breakfast will be Dutch treat. All members are invited to attend. Ralph L. Byron, M.D., of Duarte, California, will be guest speaker.

MONDAY EVENING PARTY

Arkansas Blue Cross-Blue Shield will host a party on Monday, April 29, at 6:30 P.M., for all members of the Arkansas Medical Society and special guests. The party will be held in the Golden Knight room of the Camelot Inn.

ARKANSAS SOCIETY OF CLINICAL HYPNOSIS

The Arkansas Society of Clinical Hypnosis will have its annual banquet on Monday, April 29, at 8:00 P.M. at the Sam Peck Downtown Motor Inn in Little Rock.

FIFTY YEAR CLUB BREAKFAST

The Society will host a breakfast for members of the Fifty Year Club at 7:30 A.M. on Tuesday, April 30, in the Camelot Inn. Members of the Fifty Year Club may make reservations for the breakfast at the Society's convention registration desk. Dr. G. Allen Robinson of Harrison will present the program which is entitled "Tribute to Dr. Paul Dudley White."

Dr. Ross Van Pelt of Beaver is president of the Fifty Year Club and Dr. Robinson serves as secretary.

JUNIOR BRANCH, AMERICAN MEDICAL WOMEN'S ASSOCIATION

The Junior Branch of the American Medical Women's Association will have a breakfast meeting at 7:30 A.M. on Tuesday, April 30, in the Camelot Inn. All women medical students and women physicians in the State are invited. For further information, contact Sharon Freeman, Senior Medical Student, 116 Brown Street, Little Rock, Arkansas 72205.

ARKANSAS STATE BOARD OF HEALTH

The Arkansas State Board of Health will have a luncheon meeting at 12:00 noon on Tuesday, April 30, in the Camelot Inn.

MEMORIAL SERVICE

A joint Society-Auxiliary Memorial Service will be held on Tuesday, April 30, at 11:30 A.M., in the Silver Knight room in the Camelot Inn.

TUESDAY EVENING COCKTAIL PARTY

A cocktail party will precede the Inaugural Banquet on Tuesday evening, beginning at 6:00 P.M. in the Silver Knight room at the Camelot Inn.

PRESIDENT'S INAUGURAL BANQUET

The social highlight of the 1974 annual session will be the President's Inaugural Banquet on Tuesday evening, April 30, in the Golden Knight room in the Camelot Inn, beginning at 7:00 P.M.

The Society President, Dr. John P. Wood, will act as master of ceremonies. Dr. Ben N. Saltzman will be installed as president for 1974-75.

Tickets for the banquet will be available at the Society's convention registration desk.

PAST PRESIDENT'S BREAKFAST

The traditional breakfast for former presidents of the Arkansas Medical Society will be held at 7:30 A.M. on Wednesday, May 1, in the Camelot Inn.

ARKANSAS FOUNDATION FOR MEDICAL CARE

The Arkansas Foundation for Medical Care will meet on Wednesday, May 1, immediately following the re-organizational meeting of the Council of the Arkansas Medical Society in the Golden Knight room in the Camelot Inn.

Distinguished Guest Speakers



MALCOLM C. TODD, M.D.
President-elect
American Medical Association
Long Beach, California

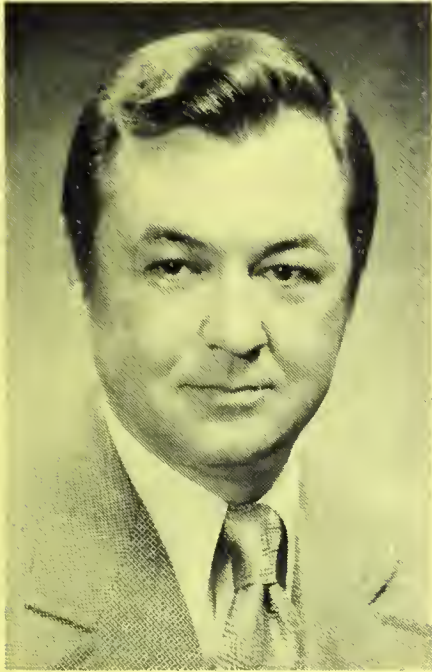
H. AUBRY TALLEY, M.D.
Chief Resident
Department of Obstetrics and Gynecology
University of Arkansas School of Medicine
(PHOTO NOT AVAILABLE)

R. TONY COUNCIL, M.D.
Senior Resident
Department of Obstetrics and Gynecology
University of Arkansas School of Medicine
(PHOTO NOT AVAILABLE)

CARL NELSON, M.D.
Orthopaedics
Cleveland Clinic
Cleveland, Ohio
(PHOTO NOT AVAILABLE)

PAUL C. PETERS, M.D.
Chairman and Professor
Division of Urology
University of Texas Southwestern Medical School
Dallas, Texas
(PHOTO NOT AVAILABLE)

Distinguished Guest Speakers



BYRON G. BROGDON, M.D.
Professor and Chairman
Department of Radiology
University of New Mexico
School of Medicine
Albuquerque, New Mexico

E. C. FERGUSON, III, M.D.
Professor and Chairman
Department of Ophthalmology
University of Texas Medical Branch
Galveston, Texas
(PHOTO NOT AVAILABLE)

MILOS BASEK, M.D.
Professor of Ear, Nose and Throat
Columbia Presbyterian Medical Center
New York, New York
(PHOTO NOT AVAILABLE)



JAROSLAV F. HULKA, M.D.
Associate Professor
Department of Obstetrics and Gynecology
University of North Carolina
School of Medicine
Chapel Hill, North Carolina

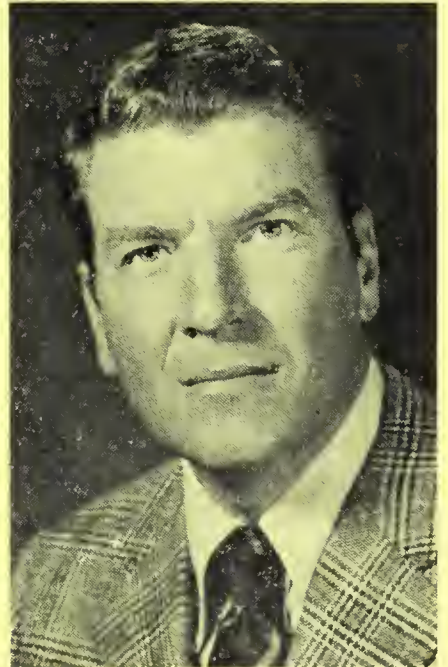


HEINZ F. EICHENWALD, M.D.
Professor and Chairman
Department of Pediatrics
The University of Texas Health Science
Center at Dallas
Dallas, Texas

JOE VERSER, M.D.
Secretary
Arkansas State Medical Board
(PHOTO NOT AVAILABLE)

MR. EUGENE WARREN
Legal Counsel
Arkansas State Medical Board
(PHOTO NOT AVAILABLE)

ELOIS FIELD, Ph.D.
Dean, School of Nursing
University of Arkansas
(PHOTO NOT AVAILABLE)



W. DUCOTE HAYNES, M.D.
Radiology Associates
Little Rock, Arkansas



REUBEN B. WIDMER, M.D.
Assistant Professor
Department of Family Practice
University of Iowa College of Medicine
Iowa City, Iowa

Scientific Program

Monday Morning, April 29, 1974

ROBINSON AUDITORIUM

(enter through exhibit area)

Guy R. Farris, M.D., First Vice President, Presiding

SEMINAR: ABORTION

- 9:00 "The Law"
Mr. Eugene Warren
- 9:15 "Saline Abortion"
H. Aubry Talley, M.D.
- 9:30 "Suction Curettage"
R. Tony Council, M.D.
- 9:45 "Complications"
Jaroslav F. Hulka, M.D.
- 10:00 Discussion
- * * * * *
- 10:30 Intermission — Visit Exhibits
- 11:00 "Total Knee Replacement"
Carl Nelson, M.D.
- 11:30 "Evaluation of Scrotal Masses"
Paul C. Peters, M.D.

Monday Afternoon, April 29, 1974

ROBINSON AUDITORIUM

Donald L. Duncan, M.D., Second Vice President, Presiding

- 1:30 "The Use of Newer Antibiotics in Pediatric Practice,
Comparative Assessments"
Heinz F. Eichenwald, M.D.
- 2:00 "Thyroid Eye Disease Pearls"
E. C. Ferguson, III, M.D.
- 2:30 "Radiological Manifestations of Diabetes Mellitus"
Byron G. Brogdon, M.D.
- 3:00 "Problem Oriented Medical Records"
Reuben B. Widmer, M.D.
- 3:30 "Sterilization by Laparoscopy"
Jaroslav F. Hulka, M.D.

Tuesday Morning, April 30, 1974

ROBINSON AUDITORIUM

Asa Crow, M.D., Third Vice President, Presiding

- 9:00 Seminar: "Physician's Assistants — Nurse Practitioners in Arkansas"
Moderator: G. Thomas Jansen, M.D.

Panel:

Malcolm Todd, M.D.

Elois Field, Ph.D.

Joe Verser, M.D.

Mr. Eugene Warren

10:30 "Surgical Treatment for Meniere's Disease"

Milos Basek, M.D.

11:00 Intermission — Visit Exhibits

11:30 Adjourn for Memorial Service

HOBBY EXHIBIT

Doctor, do you have an interesting hobby? Would you share the hobby with colleagues by participating in a hobby display at the annual convention? We would like to hear from members with hobbies such as photography, painting, sculpture, other arts and crafts, etc. Please contact:

Leah Richmond

Arkansas Medical Society

Post Office Box 1208

Fort Smith, Arkansas 72901

782-8218

Related Meetings

ASSOCIATION OF TUMOR CLINIC STAFF MEMBERS IN ARKANSAS

The Association of Tumor Clinic Staff Members in Arkansas will have its annual luncheon meeting and Cancer Seminar beginning at 12:00 noon on Monday, April 29, in the Camelot Inn. Guest speaker will be W. Ducote Haynes, M.D., of Little Rock. The subject of Dr. Haynes' presentation will be "Breast Cancer — Radical Mastectomy Versus Simple Mastectomy and Radiation Therapy."

ALAN CAZORT ALLERGY SOCIETY OF ARKANSAS

The Alan Cazort Allergy Society of Arkansas will meet for a business luncheon at 12:00 noon on Monday, April 29, in the Camelot Inn. The luncheon will be Dutch treat.

ARKANSAS SOCIETY OF CLINICAL HYPNOSIS

The Arkansas Society of Clinical Hypnosis will have its annual meeting on Monday, April 29, at 8:00 P.M. at the Sam Peck Downtown Motor Inn in Little Rock. Vladimir Bensen, M.D., Vice President of the American Society of Clinical Hypnosis, will be the guest speaker. Dr. Bensen will speak on "Hypnosis Today." For further information contact Ray Biondo, M.D., Post Office Box 921, North Little Rock, Arkansas 72115, telephone 758-2588.

RADIOLOGY

The Arkansas Chapter of the American College of Radiology will have a luncheon beginning at 12:00 noon, followed by a business session and scientific lectures, on Tuesday, April 30, in the Camelot Inn. Bryon G. Brogdon, M.D., Professor and Chairman, Department of Radiology, University of New Mexico School of Medicine in Albuquerque, will be the guest speaker. Dr. Brogdon will speak on "Radiology Department Planning."

UROLOGY

The Urology Section, Arkansas Medical Society, will meet on Tuesday, April 30, in the Camelot Inn. Luncheon will be at 12:00 noon, followed by a business meeting. Paul C. Peters, M.D., Chairman and Professor, Division of Urology, University of Texas Southwestern Medical School, Dallas, Texas, will be the guest speaker. A Pyleogram Conference will be held following Dr. Peters' presentation.

PATHOLOGY

The Arkansas Society of Pathologists will have a luncheon and business meeting on Tuesday, April 30, at 11:30 A.M. in the Camelot Inn.

ARKANSAS ACADEMY OF FAMILY PHYSICIANS

The Arkansas Academy of Family Physicians will meet on Tuesday, April 30, in the Convention Center. There will be a luncheon beginning at 12:30 P.M., followed by a presentation by Reuben Widmer, M.D., Associate Professor, Department of Family Practice, University of Iowa College of Medicine, Iowa City, Iowa. Dr. Widmer will speak on "Problem Oriented Medical Records."

Attendance at this meeting is acceptable for two hours credit toward requirements for the American Academy of Family Practice postgraduate medical study requirements.

The Board of Directors of the Academy will hold a board meeting following Dr. Widmer's presentation.

ORTHOPAEDICS

The Arkansas Orthopaedic Society will have a luncheon meeting on Tuesday, April 30, at 12:00 noon in the Camelot Inn. There will be a business meeting followed by a scientific session. Carl Nelson, M.D., will speak on "Geo-Medic Total Knee Arthroplasty."

EAR, NOSE AND THROAT SECTION

The Ear, Nose and Throat Section of the Arkansas Medical Society will meet at 2:00 P.M. on Tuesday, April 30, in the Convention Center. Milos Basek, M.D., Professor of Ear, Nose and Throat, Columbia Presbyterian Medical Center, New York, New York, will speak on "Tympanoplasty Problems."

EYE SECTION

The Eye Section of the Arkansas Medical Society will meet at 9:00 A.M. on Tuesday, April 30, in the Convention Center. E. C. Ferguson, III, M.D., of Galveston, Texas, and Philip Ellis, M.D., of Denver, Colorado, will be guest speakers. A discussion period will follow presentations by the speakers.

At 12:00 noon, the Eye Section will have a joint luncheon meeting with the Ear, Nose and Throat group in the Convention Center. A business session will be held in connection with the luncheon.

At 2:00 P.M., the Eye Section will move to the University of Arkansas Medical Center Eye Clinic for examination of patients and discussion of patients by Drs. Ferguson and Ellis and those in attendance.

EYE, EAR, NOSE AND THROAT SECTION LUNCHEON

There will be a joint luncheon for all members of the EENT Section at the Convention Center on Tuesday, April 30, at 12:00 noon.

PEDIATRICS

The Arkansas Chapter of the American Academy of Pediatrics will meet for lunch at 12:00 noon on Tuesday, April 30, in the Camelot Inn. A business session will be held at 1:00 P.M.

The following program will be presented after the business session:

- 2:00 P.M. "Work-up and Management of Patients With Suspected
Immunological Deficiencies"
W. T. Kniker, M.D.
- 3:00 P.M. "Recent Advances in the Management of Sepsis and
Meningitis of the Newborn"
Heinz F. Eichenwald, M.D.
- 4:00 P.M. Question and Answer Panel
Drs. Kniker, Eichenwald and Dr. Robert Merrill

NEUROSURGERY

Neurosurgeons of the State are invited to meet at 1:30 P.M. on Tuesday, April 30th, in the Little Rock Convention Center to organize as a section of the Arkansas Medical Society.

Memorial Service

The annual joint Society-Auxiliary Memorial Service will be held at 11:30 A.M., on Tuesday, April 30, in the Camelot Inn. Dr. Jerome S. Levy is chairman of the memorial service.

IN MEMORIAM

SOCIETY MEMBERS

- | | |
|---|---|
| Hamilton K. Carrington, M.D.,
Magnolia | Waldo A. Regnier, M.D., Crossett |
| Thomas P. Foltz, M.D., Fort Smith | James B. Rice, M.D., Pine Bluff |
| Charles E. Garratt, M.D., Hot Springs | J. Max Roy, M.D., Forrest City |
| Elisha M. Gray, M.D., Mountain Home | Kenneth A. Siler, M.D., Harrison |
| William E. Jackson, M.D., Rison | W. Myers Smith, M.D.,
North Little Rock |
| Rass L. Johnson, M.D., Blytheville | Brooks R. Teeter, M.D., Russellville |
| William A. Lamb, M.D., Little Rock | Jack N. Thicksten, M.D., Alma |
| John R. Martin, M.D., Gravette | C. Fletcher Watson, M.D., Little Rock |
| Franklin T. Oates, M.D., Lepanto | William A. Woodcock, M.D.,
Temple, Texas |
| B. G. Parker, M.D., Booneville | |
| Gerald K. Patton, M.D., Fort Smith | |

AUXILIARY MEMBERS

- | | |
|------------------------------------|------------------------------------|
| Mrs. Drew Agar, Little Rock | Mrs. J. B. Wharton, Sr., El Dorado |
| Mrs. M. C. Hawkins, Jr., Searcy | Mrs. James D. Wilson, Little Rock |
| Mrs. Henry Hollenberg, Little Rock | Mrs. Henry M. Sims, Fort Smith |
| Mrs. W. Duane Jones, Fort Smith | Mrs. W. R. Bathurst, Little Rock |

House Of Delegates Meeting

FIRST MEETING

1:00 P.M., Sunday, April 28, 1974

The Golden Knight, Camelot Inn

Amail Chudy, M.D., Speaker of the House of Delegates, Presiding

1. Call to Order
2. Roll Call of Delegates
3. Report of Credentials Committee
4. Introduction of Guests
 - Mrs. Ben H. Johnson, Jr., Bessemer, Alabama, Vice President—Southern Region, Woman's Auxiliary to the American Medical Association
 - Mrs. A. S. Koenig, Fort Smith, President, Woman's Auxiliary to the Arkansas Medical Society
 - Mrs. George V. Roberson, Pine Bluff, President-elect, Woman's Auxiliary to the Arkansas Medical Society
5. Address by President of the Arkansas Medical Society, John P. Wood, M.D., Mena
6. Adoption of minutes of the 97th Annual Session as published in the June 1973 issue of the Journal of the Arkansas Medical Society
7. Adoption of minutes of the special session of the House held November 25, 1973, as published in the January 1974 issue of the Journal of the Arkansas Medical Society
8. Report from Arkansas Blue Cross-Blue Shield, George K. Mitchell, M.D., Vice President, Medicare and Medical Services
9. Report from Chairman of the Council, C. C. Long, M.D.
10. Reports of Committees
 - Reports published in the March Journal may be amended by Committee Chairman. All reports will be referred to the Reference Committees
11. Old Business
 - Constitutional Revisions presented for final approval:
 1. Designate senior councilor; Require annual Councilor district meetings; Require written report of councilors

2. Assign responsibility for committee guidance to three vice presidents
3. Provide for medical student membership
12. New Business
 - (Chapter XI, Section 2, of the Society Constitution pertaining to business of the House is quoted as follows for the information of the House:
"All items expected to be considered at the Annual Meeting of the House of Delegates of this Society must be printed in the Journal of the Arkansas Medical Society in the month preceding the Annual Meeting. All resolutions to be submitted to the House of Delegates at the Annual Meeting must be received in the office of the Executive Vice President twenty days prior to said meeting. Any new business proposed during the first session of the House of Delegates of this Society must have a two-thirds majority of the attending delegates voting for such introduction into this Session. Any new resolutions or other new business proposed for introduction to this House of Delegates after the first session in each Annual Meeting must have two-thirds consent of attending delegates before its introduction.")
 - The following resolutions have been submitted for consideration of the House of Delegates:
 1. Resolution from Union County Medical Society urges the Arkansas Medical Society to actively work for the repeal of PSRO legislation while fulfilling the legal requirements of the current law
 2. Resolution from Miller County Medical Society seeking repeal of PSRO
 3. Resolution from Jefferson County Medical Society favoring repeal of PSRO legislation
13. Announcements of Vacancies on State Boards
 - Arkansas State Medical Board (Member-at-Large position)
 - Arkansas State Board of Health (Second and Fourth Congressional Districts)
14. Selection of Nominating Committee
15. Adjournment

FINAL MEETING

10:00 A.M., Wednesday, May 1, 1974

The Golden Knight, Camelot Inn

1. Call to Order
2. Report of Nominating Committee
3. Elections

Society Officers:

President-elect
First Vice President
Second Vice President
Third Vice President
Treasurer
Secretary
Speaker of the House of Delegates
Vice Speaker of the House of Delegates
Councilors (one from each of the ten councilor districts)
Councilors whose terms expire are:
1. John B. Kirkley, Jonesboro
2. John E. Bell, Searcy
3. L. J. P. Bell, Helena
4. John P. Burge, Lake Village
5. J. B. Jameson, Jr., Camden
6. C. Lynn Harris, Hope
7. Robert F. McCrary, Hot Springs
8. William S. Orr, Jr., Little Rock

9. Henry V. Kirby, Harrison

10. A. S. Koenig, Fort Smith

American Medical Association Delegates:

Delegate to the American Medical Association House of Delegates (Term of C. C. Long, M.D., expires December 31, 1974).

Alternate Delegate to the American Medical Association House of Delegates (Term of Joe Verser, M.D., expires December 31, 1974.)

State Medical Board:

Member-at-Large Vacancy

4. Election to fill vacancies on State Board of Health
5. Reports of Reference Committees
6. Supplemental Report of Council
7. New Business
Any new resolution or other new business proposed for introduction to this House of Delegates after the first session in each annual meeting must have two-thirds consent of attending delegates before its introduction.
8. Adjournment

REFERENCE COMMITTEES

Reference Committees appointed by the Speaker of the House of Delegates will hold open hearings to discuss the committee reports published in the March Journal, as well as any supplemental reports and resolutions referred to them during the first meeting of the House of Delegates on Sunday, April 28. All members are urged to participate in the discussion at the meetings. The committees will meet at 3:30 P.M. on Sunday, April 28, in the Camelot Inn.

Members of the committees are:

Reference Committee No. 1:

Raymond Irwin, M.D., Pine Bluff, Chairman
Raymond Biondo, M.D., North Little Rock
John H. Moore, M.D., El Dorado
H. V. Kirby, M.D., Harrison

Reference Committee No. 2:

W. Payton Kolb, M.D., Little Rock, Chairman
W. Mage Honeycutt, M.D., Little Rock
Kenneth E. Lilly, M.D., Fort Smith
C. Lynn Harris, M.D., Hope

Reference Committee No. 3:

A. S. Koenig, M.D., Fort Smith
L. J. Pat Bell, M.D., Helena
Purcell Smith, M.D., Little Rock
James Dennis, M.D., Little Rock

STATE BOARD VACANCIES

Arkansas State Medical Board

A vacancy occurs in the Member-at-Large position on the Arkansas State Medical Board. Members are urged to present their nominees for this position to their councilor district representatives on the Society Nomination Committee. Present member: Stanley Applegate, M.D., Springdale, term expires December 31, 1974, eligible for re-appointment.

Arkansas State Board of Health

Vacancies occur in the Second and Fourth Congressional Districts, the counties of which are listed below. Members from these counties are urged to meet in the Camelot Inn immediately following adjournment of the House of Delegates meeting on Sunday, April 28, to vote for nominees. Nominations should be reported to the convention registration desk. There must be three nominees for each vacancy.

Second District —

Counties in District: Cleburne, Fulton, Independence, Izard, Jackson, Lawrence, Monroe, Prairie, Randolph, Sharp, Stone, White, and Woodruff

Present Member:

Jack R. Gardner, M.D., Searcy, term expires December 31, 1974, eligible for re-appointment.

Fourth District —

Counties in District: Ashley, Bradley, Calhoun, Clark, Columbia, Hempstead, Howard, Lafayette, Little River, Miller, Montgomery, Nevada, Ouachita, Pike, Polk, Sevier, and Union.

Present Member:

Warren S. Riley, M.D., El Dorado, term expires December 31, 1974, eligible for re-appointment.

Woman's Auxiliary

The 50th Annual Session of the Woman's Auxiliary to the Arkansas Medical Society will be held April 28 — May 1, 1974, in the Camelot Inn, Little Rock, Arkansas.

The following is an outline of the convention schedule:

SUNDAY, APRIL 28

- | | |
|-----------|--|
| 2:00 P.M. | Pre-Convention Meeting of the Board |
| 4:00 P.M. | President's Reception, all members invited |

MONDAY, APRIL 29

- | | |
|------------|---|
| 9:30 A.M. | Opening General Session |
| | Honored Guest: |
| | Mrs. Ben Johnson Regional Vice President to the Woman's Auxiliary, American Medical Association |
| 12:30 P.M. | Luncheon — Mrs. Ben Johnson, Guest Speaker |
| | Hostesses: Saline County Auxiliary Members |
| 3:00 P.M. | Sight-seeing Tour to include tour at Lock and Dam |

TUESDAY, APRIL 30

8:00 A.M.	Past Presidents' Breakfast
9:30 A.M.	Second General Session, all members invited
11:30 A.M.	Joint Memorial Service with the Arkansas Medical Society
12:30 P.M.	Luncheon — Installation of Officers Hostesses: Pulaski County Auxiliary Members

WEDNESDAY, MAY 1

9:30 A.M.	Post-Convention Board Meeting
11:30 A.M.	Adjourn

Scientific Exhibits

The scientific exhibits will be located in the Exhibition Hall of the Robinson Auditorium adjacent to the technical exhibits. All members are encouraged to visit the exhibits as they are an integral part of the scientific program.

The following exhibits will be on display:

"Hepatitis Control in Arkansas"

"Home Health Services of Arkansas Department of Health"

Division of Chronic Disease

Arkansas State Department of Health, Little Rock

"Prevention of Blindness"

Arkansas Society for the Prevention of Blindness,
Little Rock

"Cancer Information Center"

Southern Medical Association, Birmingham, Alabama

"Aldersgate Medical Camp — A Camping Opportunity for Children with Medical Problems"

Arkansas Chapter, American Academy of Pediatrics
Kelsy J. Caplinger, M.D., Chairman, Little Rock

"Medicine and Religion"

Medicine and Religion Committee, Arkansas Medical Society

"The Arkansas Council for Health Careers"

Arkansas Council for Health Careers, Inc., Fort Smith

"Hypnosis and Medicine by Arkansas Society for Clinical Hypnosis"

Medical Explorer Post 961 — Boy Scouts of America
Raymond V. Biondo, M.D., North Little Rock

"Cancer — Where Can You Turn"

Arkansas Division, American Cancer Society, Little Rock

"Vertebral Arteriography by Catheter Technique"

Radiology Consultants, Little Rock

"Clinical Pharmacology of Digoxin"

James E. Doherty, M.D., Professor of Medicine and Pharmacology
University of Arkansas Medical Center VA Hospital,
Little Rock

"Management of Epistaxis—A Family Practice Problem"

Robert N. McGrew, M.D., Associate Professor and Acting Head

Otolaryngology Division of Surgery, University of Arkansas Medical Center, Little Rock

"Surgery for Advanced and Recurrent Cancer"

Kent Westbrook, M.D., Assistant Professor of Surgery
University of Arkansas Medical Center, Little Rock

"A Vacuum-Formed Plastic Insert Seat For Wheelchair Bound, Neurologically Handicapped Patients"

John H. Bowker, M.D., Associate Professor
Division of Orthopaedic Surgery,
University of Arkansas Medical Center, Little Rock

"Office Training in Family Practice"

John M. Tudor, M.D., Chairman and Assistant Professor

Family and Community Medicine,

University of Arkansas Medical Center, Little Rock

"Surgical Treatment of Valvular Heart Disease"

G. Doyne Williams, M.D., Associate Professor of Surgery

University of Arkansas Medical Center, Little Rock

"Postgraduate Psychiatry in Arkansas"

Bob Matthews, M.D.

University of Arkansas Medical Center, Little Rock

"Vascular Surgery"

J. T. Davis, Jr., M.D., Memphis, Tennessee

"Auricular Repositioning Otoplasty"

Ellery C. Gay, Jr., M.D., Little Rock

"Maxillofacial Fractures"

Tom Smith, M.D., Little Rock

"Eye Signs in Systemic Diseases"

T. Dale Alford, M.D., Little Rock

"Audio-Visual Aids in Teaching Medical Students and in Counseling"

Harry Hayes, Jr., M.D., Little Rock

"Fiberoptic Colonoscopy and Polypectomy"

Thomas J. Smith, M.D., Little Rock

(Title To Be Announced)

Allen McKnight, M.D., Little Rock

"Facial Rehabilitation in the Office"

D. B. Stough, III, M.D., Hot Springs

"Diagnosis and Treatment Atherosclerosis"

John E. Allen, Jr., M.D.

Little Rock Surgery Clinic, P.A., Little Rock

(Title To Be Announced)

Carl L. Williams, M.D.

Westark Surgical Clinic, P.A., Fort Smith

"Two Year Experience with LIGHTCAST"

Arkansas Orthopaedic Clinic, P.A., Little Rock

Little Rock Orthopaedic Clinic, Little Rock

"Stereotactic Procedures in Neurosurgery"

Steve Flanigan, M.D., Department of Neurosurgery

University of Arkansas Medical Center, Little Rock

"Hyperlipoidemia"

Robert Bulloch, M.D., Department of Medicine

University of Arkansas School of Medicine, Little Rock

"High Blood Pressure Screening"

Arkansas Heart Association, Little Rock

"Immunofluorescent Techniques in Diagnosis of Skin Diseases"

University of Arkansas Medical Center, Division of Dermatology, Little Rock

"Medical Exploring — Boy Scouts of America"

Memorial Hospital, North Little Rock

Technical Exhibits

The business firms who purchase exhibit space at our Annual Session contribute a great deal to the financing, as well as to the educational aspects, of the meeting. The number of visits to the technical exhibits is the only criterion by which these companies can judge the value they receive from the investment in booth rental, displays, and employee's time. You will be rewarded for the time you spend visiting the exhibits. Following are descriptions of displays to be featured.

SANDOZ PHARMACEUTICALS

Sandoz Pharmaceuticals cordially invites you to visit our display at booth #1, where we are featuring MEL-LARIL, HYDERGINE and SANOREX.

Any of our representatives in attendance will gladly answer questions about these and other Sandoz products.

BANREAL COMPANY

Our display will describe the advantages, options, and types of equipment that leasing affords. Literature and information available for the Society membership. Someone will be available at all exhibit hours to answer questions about our leasing program.

RUCKER PHARMACAL COMPANY, INC.

Rucker Pharmacal Company, Inc. will display drugs from their cardiovascular, cough, cold, and respiratory products lines. All members are invited to visit the booth and discuss these products with Rucker representatives.

HOECHST PHARMACEUTICALS, INC.

"The representatives at the Hoechst booth will be happy to discuss their products with particular application to the physician's individual practice. Featured are Lasix, Surfak and Doxidan."

ORTHO PHARMACEUTICAL CORPORATION

Welcome to Booth #6 where the Ortho Pharmaceutical Corporation is proud to present the most complete line of medically accepted products for the control of conception. Also on display will be our well-known products for the treatment of various forms of vaginitis. Your questions will be welcome.

PROFESSIONAL LEASING COMPANY

You are cordially invited to visit the Professional Leasing Company exhibit and meet our representatives who will welcome the opportunity to discuss the various types of lease-arrangements for the medical profession.

SAFEGUARD BUSINESS SYSTEMS

Safeguard Business Systems will have representatives present to discuss with members of the Society their book-keeping systems for medical offices. These services include billing, disbursements, and payroll.

GENERAL MEDICAL CORPORATION

You are cordially invited to visit the General Medical Corporation exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

THE ST. PAUL INSURANCE COMPANIES

The St. Paul's purpose in providing an exhibit is to keep the lines of communication open between the doctors of Arkansas and the company concerning Physicians' and Surgeons' Malpractice Liability. We will have qualified company personnel in our booth who will be happy to discuss any questions or concerns the doctors may have pertinent to professional liability and related coverages. There will also be informational material available on the subject and we will have a complete listing of all the agents who represent us through the State of Arkansas for the convenience of the doctors.

SEARLE LABORATORIES

You are cordially invited to visit the SEARLE booth where our representatives will be happy to answer any questions regarding Searle Products of Research.

Featured will be information on OVULEN®, DEMULEN®, ENOVID®, ALDACTAZIDE®, FLAGYL®, LOMOTIL®, PRO-BANTHINE®, METAMUCIL® and other drugs of interest.

SCHERING LABORATORIES

"SCHERING LABORATORIES' exhibit is featuring ETRAFON®, DRIXORAL® and VALISONE®. Our representatives are available to answer any questions you may have."

THE UPJOHN COMPANY

THE UPJOHN COMPANY exhibit will feature two of the company products, Cleocin and Lincocin. Members of the Society are invited to discuss these products with Upjohn representatives in the booth.

BRISTOL LABORATORIES

You are cordially invited to visit our exhibit reflecting Bristol's leadership and enduring commitment to the manufacturing of life-saving antibiotics.

For your consideration, the following Bristol products are featured: Versapen® (hetacillin), Kantrex® (kanamycin sulfate), Tetrex® (tetracycline phosphate complex), Prostaphlin® (sodium oxacillin), Salutensin® (hydroflumethiazide and reserpine), Bristamycin® (erythromycin stearate), Naldecon® (antihistamine decongestant), and Polycillin® (ampicillin trihydrate).

Our representatives welcome the opportunity to answer your inquiries.

DOME LABORATORIES

The representative at the Dome Laboratories booth will be happy to discuss products of interest. A cordial invitation is extended to all members of the Society to visit the booth.

AMS DIVISION, SYSTEMEDICS, INC.

More people are receiving more and better health care today than ever before. However, insurance forms and other growing paper work requirements, along with shortages of trained personnel, have led to increased management costs and increased demands on time. Too often, administrative control has suffered from lack of timely summary information, even in offices using semi-automated information handling systems.

SYSTEMEDICS/AMS specializes in the development of computerized management systems for the health care professions . . . our main business. SYSTEMEDICS/AMS' proven system for management of accounts receivable generates the numerous summary information reports that will save time and money, and provide the control necessary in the operation of medical offices and clinics.

A full range of information management systems is available including storage of vital financial data on microfilm at a second location.

THE MARKS AGENCY, INC.

THE MARKS AGENCY will have information on the Arkansas Medical Society Life Insurance Plan and information on professional associations.

WILLIAM P. POYTHRESS AND COMPANY, INC.

WILLIAM P. POYTHRESS AND COMPANY, INC., manufacturers of ethical pharmaceuticals for one-hundred-eighteen years, cordially invites you to visit our exhibit where our representative, Mr. T. L. "Bru" Brubaker, will be glad to discuss any Poythress products.

PFIZER LABORATORIES DIVISION

A cordial invitation is extended to all members and guests attending to visit the Pfizer Laboratories booth. We will have trained representatives in attendance to answer questions about our products.

CUMMINGS X-RAY COMPANY

Our display will feature our new Trace-Ray 300 M.A. at 125 P.K.V. X-Ray Control, designed to sell at a price

you would expect to pay. We will also show our new Pakorol I4 X Automatic Processor for the doctor's office or clinic, designed to fit in any dark room, fast dry to dry processing in 2 minutes, portable, easy to install in the space the hand developing tank occupies, economically priced.

ARKANSAS BLUE CROSS-BLUE SHIELD

Need information and assistance with Blue Cross and Blue Shield related portions of your practice? Is your medical technician new? Does she need help with your Blue Shield claims? May we assist you with your questions on Medicare and Medicaid? Do you need information on coordination of benefits and reciprocity?

Our booth is for your convenience and we welcome your visit. Blue Cross and Blue Shield's representatives will be on hand to discuss and help solve case problems involving your patients and secure answers to your questions. We are seeking a closer working relationship to better serve you. Stop by and allow our Professional Relations personnel to address themselves to your needs.

FIRST ARKANSAS LEASING CORPORATION

First Arkansas Leasing Corporation will display a group of pictures representing the various types of equipment that can be leased by the medical profession; brochures explaining our leasing program will be available; the "Advantages of Leasing" will be presented; a FALCO representative will be available for lease quotations and for questions concerning leasing in general as directed and governed by the Internal Revenue Service.

THE EMKO COMPANY

THE EMKO COMPANY, specialists in foam delivery systems, presents EMKO VAGINAL FOAM CONTRACEPTIVE, EMKO PRE-FIL, EMKO DIENESTROL FOAM for atrophis vaginitis, SUNRIL CAPSULES for relief of tension and pain related to menstruation, and MY OWN FEMININE HYGIENE SPRAY, TOWEL-ETTES and SPRAY POWDER. Professional detailed information on all EMKO products is available at the EMKO booth.

PITNEY BOWES

You are cordially invited to visit the Pitney Bowes booth and meet our representatives who will welcome the opportunity to discuss products of interest with you.

RATHER, BEYER AND HARPER

Representatives of Rather, Beyer, and Harper will have brochures and all information on the Arkansas Medical Society group plans of insurance—specifically the Income Protection Plan which is now issued on a guaranteed renewal basis, the Office Overhead Expense Plan and the new Million Dollar Professional Liability Policy. Records will be available so that each doctor may review the insurance coverages which he has under the group plans of the Arkansas Medical Society.

CIBA PHARMACEUTICAL COMPANY

Hypertension and MBD are our bag. Visit the CIBA booth for the latest on screening, identification and therapy.

AMERICAN INTERPLEX CORPORATION

The American Interplex Corporation invites all members and guests to visit their booth and discuss with their representatives products of interest.

WILLIAM T. STOVER COMPANY, INC.

The William T. Stover Company, Inc., of Little Rock, will have a booth staffed with informed and qualified representatives—eager to welcome you and assist in any manner possible—as well as to show you the up-to-date developments in the medical surgical industry.

ENCYCLOPEDIA BRITANNICA

A cordial invitation is extended to all members and guests attending to visit the Encyclopedia Britannica booth. We will be exhibiting the great new Britannica 3, Britannica Junior and other related products.

PARKE-DAVIS AND COMPANY

Our representatives will discuss selected pharmaceutical products at the Parke-Davis booth.

ARMOUR PHARMACEUTICAL COMPANY

We cordially invite the members of the Arkansas Medical Society to visit the Armour Pharmaceutical Company Booth #42. *Thyrolar*, Sodium Lithyronine (T_3) and Sodium Levothyroxine (T_4), and *Nicolar*TM (anti-lipemic, niacin tablest Armour) are the featured products.

A. H. ROBINS COMPANY

You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

ARKANSAS REGIONAL MEDICAL PROGRAM

Arkansas Regional Medical Program's exhibit will be on ARMP's statewide involvement in the delivery of quality health care. Our representative will be present to provide information and answer questions.

STUART PHARMACEUTICALS

"The Stuart Pharmaceuticals booth consists of graphic panels, product samples and literature describing some or all of the following products: MYLANTA, CHEWABLE SORBITRATE, SORBITRATE Sublingual and Oral, KINESED, STUARTNATAL 1 + 1 and others."

MOUNTAIN VALLEY SPRING COMPANY

Mountain Valley Water is considered one of the leading mineral drinking waters of the world. Low-salt, hard, pleasant to taste, it is the only spring water available across the nation. The spring, at Hot Springs, has been used constantly for 102 years.

* * *

The Arkansas Medical Society expresses appreciation to the following companies for educational grants for the Society's convention:

Eli Lilly Company

Mead Johnson Laboratories



House Of Delegates Business Affairs

Reports printed below are brought to the attention of individual members and the county medical societies. The items reported here represent those received in time for publication in advance of the meeting. All reports will be referred to reference committees. Members are urged to attend the open hearings of the reference committees to express their views. Reference committee hearings are scheduled for 3:30 P.M. on Sunday, April 28.

ANNUAL COMMITTEE REPORTS

Committee on Cancer Control

Charles R. Henry, M.D., Chairman

The Committee on Cancer Control has worked with the Task Force for "Uterine Cancer" of the American Cancer Society. The overall plan is to offer pap smears to all women of the State who have never had such a test, especially the indigent, the older age group, and the young with several children.

The first meeting was held in July 1973 and it was decided to run two pilot studies before

organizing for a large statewide effort. Dr. John Broadwater of Fort Smith suggested that Crawford County be the first pilot study area. This was agreed upon and in December, the first clinic was in Alma (87 patients) on Saturday, December 6th; Natural Dam, north of Van Buren, on Sunday, the 7th (29 patients) and Van Buren, the following Thursday evening, the 13th, with 203 patients. Fifty percent to sixty percent of these women had never had a pap smear. Most tests were negative, although four were Class II, and four Class III and one invasive (I-B) were found.

A meeting was held on January 30th to hear Dr. Broadwater's report and to discuss the next area for another pilot study. Jefferson County was chosen and work has begun to investigate possible sites for these clinics to be held.

Dr. Broadwater performed a magnificent achievement of organization and delivery of intentions. All who assisted in the performance of this duty should be highly praised.

Sub-Committee on National Legislation

William S. Orr, Jr., M.D., Chairman

The Sub-Committee on National Legislation met prior to the mid-winter meeting at the Sheraton Hotel in Little Rock, Arkansas. Our discussions centered primarily on the manner in which information concerning national legislation that particularly affects the health care system should be brought to the attention of the membership. The general consensus was that important items should be mailed to all physicians over the State through our Society office.

There was a question raised as to the feasibility of developing some type of national legislative report that would concern itself with various resolutions and measures introduced to the National Congress; however, this would involve a certain amount of expense for the publication and editing of such a newsletter. Further discussion of this item will be taken up at our next meeting during the spring.

The Program Chairman of the Society spring session met with our committee to ascertain the feasibility of submitting certain discussion topics for the program of the spring meeting. The primary concern of our committee at this time was the presentation of the subject of abortions and this matter was so discussed with the program chairman.

The Committee did feel that 1974 would be an extremely important year in the field of National Legislation and that every effort should be made to see that each individual practicing physician in this State is kept aware of the many changing aspects of the various measures presented to Congress in the course of their deliberations this year.

Committee on Public Health

(Rural Health)

Ben N. Saltzman, M.D., Chairman

The Committee on Public Health has once again cooperated with the Extension Service in supporting and judging the 4-H health activities for the State. Many of the councilors of the State Medical Society acted as judges for eight district 4-H O-Rama health activities and presented trophies from the Arkansas Medical Society to the district winners. The Chairman presented a trophy to the State winner at the

annual meeting in Conway, Arkansas, on August 14, 1973.

In addition, this year the Public Health Committee has endorsed the State Health Department's Venereal Disease Control activity and plans to work with the Health Department in promoting more effective control by the medical profession in Arkansas.

The Committee continues to promote programs sponsored by the Council on Rural Health of the American Medical Association. The Chairman served on a panel for the National Rural Health Conference on March 28th in Dallas, Texas. His paper was published in the December issue of the *Massachusetts Physician*.

The Committee on Public Health is also co-operating with the State Health Department on Home Health Services.

Committee on Mental Health

W. Payton Kolb, M.D., Chairman

The Committee on Mental Health has discussed and studied the reports from the Chairman concerning the conference last spring on the "Patients' Right To Treatment." The Committee is not aware of any cases pending in this State at this time. In general, the Committee recognizes the patient's rights in this area and feels the people concerned in Arkansas are aware of these rights.

The laws governing admission were rewritten recently and, to this point, no problems have arisen. It is felt in this State, the patient's rights are protected adequately but surveillance should be maintained, particularly in regard to any problems that may arise, to be sure this is guaranteed to the patient.

The Committee re-emphasizes its recommendation of last year that the physicians over the State should and must become interested and involved in the workings of their Community Mental Health Centers. Medical input is essential to the adequate operation of such centers.

Notice is taken of the increasing number of psychiatrists, scattered over the State, outside the Central Arkansas Region. This is making service available to more people closer to their homes and the Committee is grateful for this. It is hoped these people will also be involved with the local Community Mental Health Centers.

The Committee is aware of the need to be constantly aware of changes in all areas of medical practice and to be sure that Psychiatry continues to be an intricate part of medicine.

Sub-Committee on Traffic Safety
Carl L. Williams, M.D., Chairman

The Sub-Committee on Traffic Safety met at the Sheraton Hotel, Room 219, on November 25, 1973. Those in attendance were: Dr. Sam Landrum, Fort Smith; Dr. Carl Williams, Fort Smith; and Mr. Lyman Long, Executive Director, Arkansas Trauma Society.

The first order of business was a report by Dr. Williams of the 17th Annual American Association of Automotive Medicine meeting held in Oklahoma City.

It was emphasized during the meeting in Oklahoma City that Arkansas was one of eleven states that had no medical evaluation for driver's license and that there was no committee available to the Governor to act in an advisory capacity relating to medical evaluation for drivers. The committee was unanimously in favor of presenting a resolution to the House of Delegates of the Arkansas Medical Society asking the State Legislature to require a medical evaluation for drivers, particularly those over the age of sixty, and those involved in more than two auto accidents.

The committee chairman was asked to draft a resolution regarding this to be evaluated by the committee members prior to the House of Delegates meeting.

In a second report concerning the use of driver restraints, it was pointed out that there had been a 40% reduction in auto fatalities in Australia since the compulsory use of restraints and that it was thought appropriate to call this to the attention of the House of Delegates and to further advise the State Legislature that compulsory use of restraints was approved by this Committee.

The large number of fatalities associated with motorcycle accidents and the young age of the drivers involved were of great concern to the Committee, and it was recommended by the Committee that operators of motorcycles should have to obtain a driver's license much as the drivers of autos. It was thought that this would prevent motorcycles being driven by those less

than 16 years of age and would offer more rigid control of those granted licenses above this age.

It was of some concern to the Committee that many of the new bicycles being ridden at night had neither reflectors nor lights and that attention should be called to the State Police that there are now laws requiring these vehicles to be lighted when they are ridden at night.

Of great concern to the Committee was the proliferation of drug usage by drivers and the apparent poor dissemination of information regarding many of these drugs which reduce the drivers' physical capabilities to the point that they perhaps should be omitted or reduced in dosage while the person is driving. It was thought appropriate by the Committee to ask the Arkansas Pharmacy Committee Association if it would be possible to place warnings on such drugs as antihistamines, mood altering drugs and hypnotics, that these drugs should not be taken prior to driving.

There being no further business, the meeting adjourned.

Sub-Committee on Liaison with
Vocational Rehabilitation
Paul G. Henley, M.D., Chairman

The meeting was held November 25, 1973, in conjunction with the winter session of the Arkansas Medical Society at the Sheraton Inn in Little Rock. Members of the Committee attending the meeting were Dr. John Wood, Dr. King Wade and Dr. Tom Coker. Mr. Lewis Urton from the Rehabilitation Department was present.

The eligibility requirements for assistance from the Rehabilitation Service were the primary topics of discussion. These requirements have undergone drastic changes in the recent past. The Agency will now assist clients with a substantial handicap, as well as those having good potential for completing a planned program as well as other programs already in effect by the Rehabilitation Service. The substantial work handicap means those who are severely disabled and have no skills to perform work in line with their abilities. Generally, "severely disabled" will be those who are handicapped because of one of the following disabilities:

(1) mental retardation, (2) deafness, (3) paraplegia, quadriplegia, and other spinal cord injuries or diseases, (4) heart disease, (5) cancer,

(6) stroke, (7) epilepsy, (8) mental illness, (9) cerebral palsy, (10) brain damage, (11) arthritis, (12) muscular dystrophy, (13) cystic fibrosis, (14) renal failure.

It was also brought out that a new act in 1972 brought in various disabilities from the Welfare Department to be handled by the Rehabilitation Service. The Vocational Rehabilitation Act of September 1973 defines the list above and includes trust fund cases, Social Security and insurance benefits, as well as certain other cases. The cases that have been accepted by the Rehabilitation Service in the past have been generally excluded. In December of 1973, we began to work under a new set of guidelines that will cut down on aid to minimal disabilities and will increase aid to maximum disabilities. The rehabilitation care of maximum disabilities will double and quadruple costs it is felt. Medicare and Medicaid now pay for many services formerly paid for by Rehabilitation. It was pointed out that Social Security, Medicare and Medicaid insurance will be very helpful in continuing some of the services at less cost to the Rehabilitation Service. Mr. Urton gave a report on the financial aspects, including the fund on the national level. College education payments for minimal disabilities have been eliminated except for those already involved. Annually, the Rehabilitation Service will probably be serving fewer cases overall. The center for all spinal cord injuries involving the Rehabilitation Service has been set up at the Hot Springs Rehabilitation Center.

It was specifically emphasized that new priorities and new directions are now directed to the maximum disabilities as mentioned above. The cooperation and understanding between the Arkansas Medical Society members and the Arkansas Rehabilitation Service is imperative for the proper functioning of the program as outlined by the Rehabilitation Service for the severely handicapped individual who has generally been excluded from aid in the past. There will probably be no reduction of the number of doctors involved in the program.

Committee on Medical Education

C. Lewis Hyatt, M.D., Chairman

Members of the Medical Education Committee met at 10:00 A.M. at the Sheraton Hotel, Little Rock, on the 25th of November 1973.

Members of the committee present were Drs. Hyatt, Capes, Parker, Ellis, Dickins, Peters, Shorey, and Harris. Guests were Dr. Redman, University of Arkansas Medical Center; Dr. Tudor, University of Arkansas Medical Center, and Dr. Lilly, Fort Smith.

Discussion largely centered around, first, the Area Health Education Center (AHEC) Program of the Medical Center which is just being implemented and developed at Fort Smith, El Dorado and Pine Bluff. This program is designed to bring medical education into centers away from the University in an effort to encourage physicians to go into primary care and into the lesser populated areas of the State. Dr. Shorey outlined this program in some detail. It apparently has considerable merit and should give some satisfactory results in this direction.

Drs. Shorey and Tudor briefly outlined some of the development of the Family Practice Department at the Medical Center.

The second part of the discussion was largely concerned with postgraduate and continuing education programs for practicing physicians. Dr. Lee Parker led this discussion. Due to the many professional, legal and governmental pressures for continuing education, some vital steps must be taken by our Medical Society to assure the availability of this type education. Several states already have regulations concerning relicensing procedures based on continuing education and this also is a factor in quality control and peer review by Blue Cross-Blue Shield and other third parties, including Medicare and other government programs. It is a must for our own medical professions to lead in this effort.

Dr. Ellis suggested the formation of a Medical Education Foundation by the Society, to be funded in one of several different ways, to provide this postgraduate education in the local community and in the University Medical Center. An increase in Society dues, earmarked for this purpose; assistance by hospitals of the local community as a part of quality control programs; seminars by drug houses; seminars by the Medical School; and postgraduate courses by professional societies were discussed. Also discussed was the possible use of closed circuit television or even educational television at given times to be viewed by physicians and/or paramedical personnel.

This continuing education problem is one that requires the attention of the Council and officers of the Arkansas Medical Society.

Committee on Public Relations

A. C. Bradford, M.D., Chairman

During the past year, the Committee on Public Relations has been working closely with Mr. John McIntosh, the Assistant to the Executive Vice President of the Society. Much has been accomplished for the Society during the past year. Mr. McIntosh has been regularly calling on the various component societies of the Arkansas Medical Society and has been well received on all occasions. From July to October of 1973, five public service announcements on the history of medicine in Arkansas were aired on the public television stations in the State. An additional public service announcement was run by the stations in September on "Every Child by '74 Immunization" effort as was promoted by Mrs. Bumpers, wife of the Governor of Arkansas. Following this, the Society office received a telephone call, at the direction of Mrs. Bumpers, thanking the Medical Society for their timely endorsement which added credibility to the campaign. These public announcements were run by the television stations for the people of Arkansas. All of these were well done and well received.

On October 6, 1973, the Committee on Public Relations met in Little Rock. The Committee at that time reviewed the six public service announcements as were run on the television stations of the State. It was the opinion of the committee that these had been well done and commended Mr. John McIntosh for his accomplishment in these areas.

The Committee approved the presentation of four plaques to the news media that assisted Mr. McIntosh in his work of producing the public service announcements. These plaques were appropriately presented to the news media by physicians in the area in which the television stations were located.

Long range goals of the committee were discussed and it was agreed that the Committee should maintain a reaction type of program as various issues would arise. At the present time, a public service announcement is being prepared on PRSO to be aired by all television stations in the very near future.

The Committee will meet from time to time as the need arises and if there are any suggestions from the members of the Society for committee activities, we would be happy to hear from any member of the Society.

Sub-Committee on Liaison with the Auxiliary

A. S. Koenig, M.D., Chairman

A meeting with the officers of the Auxiliary was held at 8:30 A.M., November 25, 1973, at the Sheraton Hotel in Little Rock. The members of the Auxiliary made several presentations to the Committee outlining their programs which are in progress.

Mrs. Anna Sue Edmiston, State Chairman of Community Service, outlined the need for a facility for the care of emotionally disturbed juveniles in the State. She and other members of the Auxiliary have already contacted Dr. Roger Bost, the director of Social and Rehabilitative Services for the State, who agrees that the need exists. He has suggested that, when it is created, it be placed under the Department of Mental Health and Juvenile Services. Several County Judges have also been approached and they have indicated enthusiastic support for the program. Representations have also been made to Governor Bumpers, who is in agreement with the proposal.

Mrs. Edmiston has solicited the support of the Arkansas Medical Society to follow through and give added support and influence to see that the program can be brought to fulfillment. The Auxiliary feels that the backing of the Society is necessary at this time.

Recommendation: The Committee recommends that the Committee on Mental Health of the Arkansas Medical Society, chaired by Dr. W. Payton Kolb, be asked to work with the Community Service Committee of the Auxiliary in further development of their program.

Mrs. Kay Maris of Harrison, who is Chairman of the Auxiliary Safety Committee, discussed their promotional efforts through Parent-Teacher groups, programs on safety in the home, and for the proper use of bicycles.

Mrs. Jean Bradburn, Membership Chairman of the Auxiliary, pointed out that this year there are only 290 paid members of the Auxiliary. Her Committee is very anxious to stimulate Auxiliary membership and has requested that county medical societies consider sending

statements for Auxiliary dues at the same time statements for County, State and National Medical Society memberships are sent. She pointed out that the wife of a physician who is not a member of the American Medical Association is eligible for membership in the AMA Auxiliary if her husband is practicing.

Recommendation: The Liaison Committee recommends that the Arkansas Medical Society request county medical societies to send statements for Auxiliary dues at the same time statements for county and State dues are submitted.

Mrs. Joan Cornell, who is Chairman of the AMA-ERF Committee of the Auxiliary, asked if it would be possible for the Auxiliary to obtain tax-exempt status for mailing at lower rates. In order for this to be achieved, the necessity of incorporation was discussed.

Recommendations: The Council of the Arkansas Medical Society authorize Mr. Eugene Warren to work with the Auxiliary in establishing their status as a tax-exempt group and assist in incorporation of the Auxiliary if necessary.

Mrs. Cornell also mentioned that, when the meeting is in Little Rock in 1974, she did not know whether or not it would be possible for the Auxiliary to have their AMA-ERF booth in the registration areas as in the past, when the meeting has been held at the Arlington Hotel. Her Committee specifically requested that some provision be made for location of their booth in or adjacent to the registration area because many of the things which they have available to sell to promote their AMA-ERF program are purchased by physicians at the time of registration. They are concerned that, if the booth is not located in a convenient area, their promotional efforts will not be as effective.

Recommendation: The Committee requests that Mr. Schaefer contact Mrs. Joan Cornell to make provision for an appropriate place for the location of the AMA-ERF exhibit.

Advisory Committee to the Medical Assistants Society

G. Grimsley Graham, M.D., Chairman

In September, at the request of State President Betty Stipsky, we made a study of the proposed revision of the Constitution and By-Laws of AAMA, Arkansas State Society. It was our recommendation that the majority of the revisions be passed. However, due to the complexity of

the wording and a lack of understanding of the true issues, the September House of Delegates did not vote these revisions in.

In November, we were contacted again concerning this matter. Our recommendation at that time was for the Arkansas State Society to pass whatever revisions were necessary to most effectively strengthen their membership and bring their Constitution and By-Laws into line with the national organization. We have been informed that this was accomplished at the January House of Delegates meeting.

In October, the Advisory Committee supported the Society in its second statewide educational seminar held at the Sheraton Motor Inn in Little Rock. This two-day seminar was fully as successful as the first and drew a large number of medical assistants from every part of the State.

Committee on Veterans Administration Affairs

J. Warren Murry, M.D., Chairman

The Committee on Veterans Administration Affairs of the Arkansas Medical Society met at the Sheraton Inn during the winter meeting of the Arkansas Medical Society on November 25, 1973, with the following members present: Dr. Charles W. Silverblatt, Dr. Joseph W. Ledbetter, Dr. J. Warren Murry (Chairman), and Dr. Eugene J. Towbin, who was attending the meeting as an interested guest.

A letter had been written prior to the meeting to Congressman John Paul Hammerschmidt of Arkansas requesting information which might be of interest for discussion at the committee meeting. Congressman Hammerschmidt sent copies of Public Law 92-541, the Veterans Administration Medical School Assistance and the Health Manpower Training Act of 1972, and a copy of Public Law 93-82 providing for extensive review and appraisal by the National Academy of Sciences of staffing relations for Veterans Administration Hospitals. It was his suggestion that our Committee consider these laws which had been enacted and express some opinion about them concerning possible benefits to the State of Arkansas. Congressman Hammerschmidt requested our viewpoint concerning the possible role of the Veterans Administration Hospital system should one of the National Insurance proposals become law in the near future. It was reported to the Committee by Dr. Towbin that a committee had been appointed by Dean Shorey

of the Medical Center to study Public Law 92-541, the Veterans Administration Medical School Assistance Act, and that this committee had not presently completed its work.

After a most interesting discussion by members of the Committee, it was felt that the Committee would like to recommend to the Council and to the Medical Society that an effort be made to stimulate a better atmosphere of understanding and cooperation between the Veterans Administration Hospitals in the State and the State Medical Society, and that definite steps be taken in the near future to bring this about. It was also recommended that some response should be made to Congressman Hammerschmidt concerning the viewpoint of the Medical Society and, more specifically, the viewpoint of this Committee relative to the points which were brought to our attention by his letter.

Committee on Insurance

Harry Hayes, Jr., M.D. Chairman

Your Insurance Committee had only one formal meeting during the year but carried on a lot of correspondence with different insurance agencies and groups and the members of this Committee. The typical item of business was a complaint from a single physician, or a group of physicians, over a fee dispute with Aetna Insurance Company and their so-called "Form A", a copy of which has been supplied to the Council. This is the form letter which carries the statement, "Our policy covers the customary and prevailing fee in the area for the treatment or services received, and our payment to the employee is based upon the usual and customary costs of services in this area." As most of our members are aware, the Arkansas Medical Society has entered into no agreement whatsoever for peer review with Aetna and such questions have been referred to the office of the Executive Vice President and further problems along this line may, hopefully, be resolved by the Arkansas Health Care Foundation.

An interesting resolution from the Ohio State Medical Association in this regard was recently presented to the Council.

The Medical Society-endorsed insurance coverages, including life and accident and malpractice insurance, continued to offer strong and even expanded insurance programs.

The Committee continues to have a close working relationship with the State Office.

Committee on Medicine and Religion

C. R. Ellis, M.D., Chairman

This Committee met on November 24, 1973, with the following present: *Members* — Dr. Ken Lilly, Dr. Fred Henker, Dr. Carl Wenger, Dr. C. R. Ellis; *Clergy* — Dr. Don Corley. Member not present: Dr. Calvin Austin.

The group agreed on the following items:

1. An exhibit at the annual meeting of Arkansas Medical Society, April 28-May 1, 1974.
2. A breakfast meeting for members of Arkansas Medical Society and clergymen on Monday, April 29, 1974, under the direction of Dr. Carl Wenger.
3. A statewide meeting of physicians and clergymen in July, August, or September, 1974, at the new Arkansas Baptist Medical Center, Little Rock, Arkansas, in cooperation with Dr. Don Corley and with Dr. Fred Henker, Chairman.

Another meeting of this Committee has been called for February 10, 1974, to further plan for the above-listed activities.

Committee for Arrangements for Annual Session

G. Thomas Jansen, M.D., Chairman

The Committee for Arrangements for Annual Session met on September 13, 1973, at the Camelot Inn to discuss plans for the 1974 Annual Session to be held at the Little Rock Convention Center. The scientific program and other convention activities arranged by the committee are printed elsewhere in this issue.

Appreciation is extended to all committee members for their cooperation.

Physician-Nurse Joint Practice Committee

Robert F. McCrary, M.D., Chairman

This Committee met five times this year with the nurses. At the first meeting, the Committee voted to change the name and to be referred to as a Physician-Nurse Joint Practice Committee. This was subsequently approved by the Council.

The second undertaking was role definition, this being necessary because of the paramedical people who are entering into the health service team.

The third point that was discussed for action this year was to have the Arkansas State Nurses' Association and the Arkansas State Medical So-

ciety meet simultaneously and together. It was felt this would be very important in renewing the nurse-doctor relationship.

The second meeting was completely detailed to role defining and a controversy arose concerning the nurse practitioners. It was the feeling of the doctors on the committee that the nurse practitioners were not able to practice medicine without supervision of the physician.

The third meeting was when the nurses were brought before the Arkansas Medical Society Council concerning their position on nurse practitioners. The next meeting took place at which time the controversy arose again and it was determined that each party should have their attorney present to explain the Medical Practices Act and the Nurse Practices Act. At the last meeting in February, this occurred, Mr. Eugene Warren explaining the Medical Practices Act and Mr. William Nash explaining the Nurse Practices Act. It was felt by the committee and the attorneys for the committee that the nurses and doctors should work out some arrangement whereby the nurse practitioner could be utilized and, if necessary, amend both acts accordingly.

Committee on Constitutional Revision

Lee B. Parker, Jr., M.D., Chairman

1. The House of Delegates in 1973 gave final approval to the following changes:
 - A. Committee on Continuing Education was abolished and its functions included in the Committee on Medical Education.
 - B. Changed membership eligibility requirements to possession of the degree of Doctor of Medicine and a valid license to practice by the Arkansas Board of Medical Examiners.
2. The House of Delegates approved on first reading the following proposals:
 - A. Chapter VII, Section 2, delete present section and substitute:

Section 1. Each councilor shall be organizer, peacemaker and censor for his district. The two councilors in each district shall be designated "senior" and "junior" on the basis of length of tenure.

Section 2. A meeting of the members in each councilor district shall be called by the councilor at least once each year

within two months of the Annual Session for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and for informing, improving, and increasing the knowledge and zeal of the component societies and their members.

Section 3. The councilors shall jointly prepare and submit to the Council prior to the Annual Session a written report of their work and of the condition of the profession within their district.

Section 4. The necessary traveling expenses incurred by each councilor in the line of the duties herein imposed may be allowed on submission of a properly itemized statement.

- B. Chapter VI, Section 3, add as a second paragraph:

The vice presidents shall be assigned by the President of the Society as ex-officio members of certain committees of the Society. The vice presidents' responsibilities will be to stimulate, to guide, to maintain liaison, and to otherwise assist the assigned committees and their respective chairmen in the performance of their activities. In no instance will the vice president usurp or supplant the committee chairman in his responsibilities. The vice president shall not have a vote in the affairs of the committees to which he is assigned under provisions of this section.

- C. Article III, Component Societies, to read: Component societies shall consist of those county medical societies which hold charters from this Society; provided, however, that there may be a chartered society known as the "Student, Intern and Resident Society" as provided in the By-Laws.

- D. Article IV, Section 2, Active Membership. Change the last sentence in this paragraph to read:

The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing in any component society at the time of the adoption of this Section (Adopted, House of Delegates, 1937 Annual Session) nor to

the members of the specially chartered "Student, Intern and Resident Society."

E. Article V, House of Delegates, amend by adding at the end of the paragraph:

and (4) one delegate from the "Student, Intern and Resident Society."

F. Chapter I, Section 6, of By-Laws (Affiliate membership for interns and residents). Delete present section and substitute the following:

Special membership for Students, Interns and Residents

1. An annual special membership shall be granted to bona-fide students of medicine at the University of Arkansas School of Medicine and to Interns and Residents within the State of Arkansas who are physicians, provided that they are fully or partially excused from the payment of county society dues, not to exceed ten percent of the dues charged active members of the Society, and provided that the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such special members.
2. The special members resulting from this section will comprise a single component group of the State Society similar to a county society, shall have privileges of speech, may serve on committees, will receive the Journal of the Arkansas Medical Society and shall be entitled to one voting representative in the House of Delegates.

Arkansas State Advisory Committee to the Selective Service System

L. A. Whittaker, M.D., Chairman

The Arkansas State Advisory Committee to the Selective Service System has not been called upon for any action concerning the military draft; therefore, our committee has not met during the 1973-74 term.

Student AMA Liaison Committee

Alfred Kahn, Jr., M.D., Chairman

The Executive Vice President and I have contacted the President of the Arkansas Chapter of the Student American Medical Association.

We have explained that the Arkansas Medical Society is anxious to have the participation of the Student AMA at their meetings.

Furthermore, we have said that the Liaison Committee of the Arkansas Medical Society would like to have meetings with the leaders of the Student AMA about any of their problems.

There have been no formal meetings, as they have not requested any, and there have been no problems brought to our attention. The Student AMA Liaison Committee is anxious, both now and in the future, to maintain a mutual working relationship with the Student AMA as it is our feeling that these young people are now our colleagues in medicine.

This is submitted on behalf of the Student AMA Liaison Committee.

Medical School Committee

Ross Fowler, M.D., Chairman

The Medical School Committee of the Arkansas Medical Society met November 25, 1973, with many invited guests from the Medical School and Medical Society present.

The chief topic of discussion was again the shortage of health manpower and quality health care in rural communities of Arkansas.

The desire to graduate more students and to direct more into primary care was discussed and considered the responsibility of the University of Arkansas Medical Center.

The Arkansas Plan for Primary Health Care states that if primary health care is to be improved in Arkansas, it will be necessary to increase the number of family practitioners at the U.A.M.C. through an improved and expanded program of recruitment, education and training, not only using the hospitals in Little Rock, but also hospitals throughout the State.

They recommend that during the next five years, maximum production of primary care physicians must be the primary goal of U.A.M.C. They, also, strongly recommend a goal of 50% of graduates being family practitioners.

Dr. Bost stated that the increase in the production of primary care physicians would be considered in the allocation of state funds and stressed the importance of improving rural health care.

A Family Practice Department at the U.A.M.C., with a larger faculty and larger facilities, was recommended.

At the present time, there are 21 in the Family Practice Program with a faculty of six instructors. They are working in a clinic with nine examining rooms and four office rooms. Forty-five of the eighty beds of the Sheffield Hospital on the State Hospital grounds are being utilized by the Family Practice Program.

A state-wide "medical center without walls," capable of taking more students and training more for primary care in Arkansas, was strongly recommended.

Professional Services Review Organization

Charles F. Wilkins, Jr., M.D., Chairman

The Professional Services Review Organization, which serves as an advisory committee to the Medical Director of Blue Cross and Blue Shield for the consideration of claims under Medicare, Champus and Blue Cross and Blue Shield, has continued its monthly meetings during the past year. Additional members have been added, raising the number of family practitioners and specialists to twenty-three.

The use of the committee as a referral point for the HIP Committee for cases involving commercial insurance companies proved to be unwieldy and the Council has appointed a separate committee under the chairmanship of Dr. Robert McCrary of Hot Springs for this purpose.

First Councilor District Professional

Relations Committee

F. E. Utley, M.D., Chairman

The Committee received one complaint. The patient stated that a physician who had treated her child refused to fill out certain insurance forms or reports. She further stated that she had contacted the physician's secretary and the physician on several occasions without any results.

The physician involved was contacted and the problem was discussed and the necessary steps were taken to remedy the situation.

A follow-up check with the patient revealed that she was completely satisfied as to the way her complaint and problem had been settled.

Second Councilor District Professional

Relations Committee

C. W. Jackson, M.D., Chairman

One grievance complaint has been received by the Professional Relations Committee of the

Second Councilor District, which is hereby reported as annual documentation. A complete review was made of all medical records concerned with grievance complaint. Review failed to reveal any act of tort or evidence of misfeasance. The plaintiff and the office of the Executive Vice President of the Arkansas Medical Society were both advised of these findings. No further business was brought to the attention of this committee.

Fourth Councilor District Professional

Relations Committee

Sanford C. Monroe, M.D., Chairman

During the past year, no cases were submitted to this committee for consideration or action.

As a result, there has been no activity of this committee during this interval.

Sixth Councilor District Professional

Relations Committee

Paul Hughes, M.D., Chairman

The Professional Relations Committee of the Sixth Councilor District has had no cases brought before it during the past year.

Seventh Councilor District Professional

Relations Committee

C. F. Peters, M.D., Chairman

The Seventh Councilor District Professional Relations Committee handled three cases during the year 1973. All of the cases were settled in a satisfactory manner to both parties concerned, as far as this Committee knows.

Eighth Councilor District Professional

Relations Committee

Richard M. Logue, M.D., Chairman

This is to notify you that the matters that came before the Eighth Councilor District Professional Relations Committee have been handled without conflict. As chairman, I am again impressed with the generally good relationships between the Medical Society members and the public.

Ninth Councilor District Professional

Relations Committee

Ross Fowler, M.D., Chairman

No grievance was reported to the Ninth Councilor District Professional Relations Committee in 1973.

**Report of the
Second Councilor District
Paul Gray, M.D., Councilor**

Following the April State Medical Society Meeting held at Hot Springs, the Councilor gave a report of the Council meetings, and the delegate from Independence County Medical Society gave a report of the House of Delegates meeting to the Independence County Medical Society. This county society is the only one within fifty miles.

The agenda for the regular Council meetings held was presented to the Society for its recommendations. Following the Council meeting, the report was again presented to the county medical society of the decisions of the Society in order for the members to be better informed as to what the Council had acted upon.

On November 13, 1973, a Second Councilor District meeting was held at Batesville with all members of the District notified. Mr. John T. McIntosh, Assistant to the Executive Vice President, gave an interesting report about Society activities. The President, Dr. John P. Wood, and the President-elect, Dr. Ben Saltzman, and Mr. Paul Schaefer were invited to attend but, due to weather conditions, they were unable to be present.

The Second Councilor District had a called meeting Tuesday, February 12, 1974, at King's Inn, Searcy, and all members of this District were notified.

**Report of the
Third Councilor District
L. J. Patrick Bell, M.D., Councilor
Fred C. Inman, Jr., M.D., Councilor**

Apathy seems to be a great factor with a heavy work load to suppress eagerness and interest in the function of active participation of the combined areas. Some interest has been shown toward a meeting of all counties.

Guest speakers are available and the goal for 1974 is to stimulate more participation through involvement for quarterly meetings in various areas.

**Report of the
Fifth Councilor District
J. B. Jameson, M.D., Councilor**

The following report was submitted to the membership of the Fifth Councilor District at

the annual dinner meeting in El Dorado on January 16, 1974.

Since the last Fifth Councilor District annual meeting, much of the Council's work has concerned the progressive regulatory encroachment on the practice of medicine by government and many other groups. On February 4, 1973, the Executive Committee reported that the Welfare Commissioner had informed them of a proposed Hospital Admission Surveillance Program (HASP) but no action has taken place to date. Mr. Eugene Warren reported that he had been successful in his protest of proposed malpractice rate increase by Aetna and thereby saved Arkansas Medical Society members a quarter of a million dollars in insurance fees. At the request of the Eye Section, the Physician's Assistant Bill was withdrawn in order to lay the groundwork for an attempt to amend the Medical Practices Act and delete a surprise clause enacted by the previous Legislature in behalf of the optometrists, that severely limits ophthalmologists' activities. Dr. Elvin Shuffield reported that legislative action was successful in allowing the State Medical Board and Pharmacy Board to retain a private attorney (Mr. Eugene Warren) rather than utilize the Attorney General's Office. The Arkansas Foundation For Medical Care was incorporated for possible future utilization in regard to PSRO legislation.

I was privileged, as a new member of the Council, to attend the first National Leadership Conference sponsored by the American Medical Association in Chicago, February 16th through 18th, 1973. I found this to be a very well organized conference that shed a little light on the problems presented by PSRO. This was accomplished, I believe, even though HEW had not published their guidelines and they are still incomplete at this time. I was convinced, however, that our salvation hinged on a strong union, the AMA, and control of the PSRO by physicians. It was obvious that PSRO will be bad news for it not only will increase the cost of medicine but will not produce better patient care. However, it is the law and I feel there is no hope at this time of changing it.

The Council met daily during the annual meeting in Hot Springs, April 1st through 4th, 1973. It is of interest to this Councilor District that Dr. Eldon Tommey was elected as a surgery

representative of the Arkansas Medical Society Professional Service Review Organization. After many years of service on the Council, Dr. Kenneth Duzan was elected treasurer of the Arkansas Medical Society and is also on the Budget Committee. Dr. John Moore was elected to replace Dr. Duzan on the Council. Dr. George Burton is unofficial watchdog of the Council for the Fifth Councilor District!

On August 12, 1973, the Council heard a presentation on the proposed role of nurse practitioners and set up a Physician-Nurse Joint Practice Committee to keep tab of these activities. Blue Cross-Blue Shield presented a Hospital Utilization Project (HUP) that will be offered to hospitals in the State at approximately forty cents a chart processed for computer survey. On November 25, 1973, the Council was informed that Paid Prescriptions desired a physician representative and alternate for a Peer Review Committee from each of the five regions within the State. The By-Laws of the Arkansas Foundation For Medical Care were amended to include osteopath membership to conform to Public Law 92-603 regarding composition of a PSRO. I feel that a very important precedent was set when a request for financial support of the Brooksher Student Loan Fund was referred to the Budget Committee. It was noted that once a funding request is granted that it seems to be perpetual and in view of rising costs, all requests for financial assistance from the Society, no matter how deserving, must be carefully studied in order to maintain a solvent Medical Society.

Report of the Fifth Councilor District

John H. Moore, M.D., Councilor

Several significant advances were made in the Fifth Councilor District during 1973 concerning medical health care. In July 1973, twenty-seven additional private rooms were added with the opening of a new wing to Union Memorial Hospital in El Dorado. This one million dollar addition to the present facility now makes a total of 133 patient beds available for the community. Several new features were added to the hospital and were in use during 1973, which included a new Linear Accelerator for radiotherapy and a Rho Gamma camera.

During 1973, work was almost completed on the six million dollar addition to Warner Brown

Hospital in El Dorado. The anticipated date of occupation of the new facility will be in April 1974, and this new facility will contain approximately 180 private beds for health care.

In November 1973, Dr. James B. Weedman was appointed Acting Director for the University of Arkansas Area Health Education Center in El Dorado. This program will be operational in July 1974, and plans are presently underway for full implementation of this program in our area.

The Fifth Councilor District held its annual meeting at the Country Club in El Dorado in January 1974. The guest speaker was Dr. William D. Davis, Jr., from the Oschner Clinic in New Orleans. His talk was entitled "What's New in Gastroenterology." The officers elected for 1974 for the Fifth Councilor District are:

President John Alexander, M.D., Magnolia
Vice-President, Robert Murfee, M.D., El Dorado
Secretary-Treas., James Guthrie, M.D., Camden
Councilors Jack Jameson, M.D., Camden
John H. Moore, M.D., El Dorado

Report of the Sixth Councilor District

Karlton Kemp, M.D., Councilor

Our meeting will be on February 14th with our wives for a Valentine party and the program will be on medical politics.

We are also discussing having an annual meeting.

A report will be made on the meeting of the Arkansas Foundation for Medical Care which was held on Sunday, February 10th.

Report of the Eighth Councilor District

W. Payton Kolb, M.D., Councilor

The principal activities of the Eighth Councilor District are listed below. It has been a good year and much progress has been made.

A standard health insurance claim form was developed and was accepted by the State Insurance Commissioner as being adequate for all needs. It is in use at this time.

A plan was developed and approved for medical care consultants for service to the elderly at the Parrish Towers.

The District expressed support for the concept of a "medical school without walls."

The county-wide HMO concept has been in the development stage with Blue Cross and Blue

Shield. The plans have not been finalized to this point.

The District gave its support to the University of Arkansas Medical Center budget.

A permanent Liaison Committee was established between the District and the University of Arkansas Medical Center, to consider principally problems arising in the relationship between the private practice sector and the University Medical Center physicians.

A joint meeting was held with the Pulaski County Bar Association, at which time the combined groups were addressed by Governor Dale Bumpers.

Approved and helped with the summer camp program for children with chronic medical problems. Some financial aid was provided as well as services from some of the physicians in the District.

The District worked with Metroplan in the planning and request for a grant for the establishment of Emergency Communications.

Cash scholarships were established at UALR as part of the Blood Donor Plan.

A resolution was passed and all support possible given to ophthalmologists in regard to their problem of the State law regarding medical assistants.

A program was held utilizing a panel for discussion of emergency medical care.

Physicians were recruited as volunteers to man emergency stations at War Memorial Stadium during sports events.

A program was held discussing the question of patients' abuse of drugs and medications.

Several physicians in the District were appointed to serve in the Health Section of the "Goals for Central Arkansas."

Information was obtained and reported to the State Medical Board concerning paramedics performing insurance examinations.

The District notes with regret the death of three of its members during the past year: Drs. Nicholas W. Riegler, Sr., Myers Smith and Fletcher Watson.

Report of the Ninth Councilor District

Morriss M. Henry, M.D., Councilor

On Tuesday, February 6, 1973, the Ninth Councilor District held a meeting at the Fayetteville Holiday Inn. The speaker for the evening

for the physicians was Dr. Stuart Levin. Dr. Levin is Associate Professor of Medicine at Rush Medical School and Chief of the Infectious Disease Section at Presbyterian Hospital, Chicago, Illinois. The subject was "Office Management of Infectious Diseases." Mrs. Diane Kincaid spoke to the wives on the Governor's Commission on the Status of Women. There was a large attendance and members were present from a number of counties.

The Ninth Councilor District had a second meeting of the year on Friday, November 16th, at the Fayetteville Holiday Inn. This was a joint effort on the part of the councilors of the Ninth District, the Washington County Medical Society, and the Washington County Chapter of the American Cancer Society and the ANL Laboratory, who all worked together to get a group of outstanding speakers from various parts of the United States for a seminar on current methods of treating cancer. The speaker for the evening was Senator J. William Fulbright who flew down from Washington to speak to the group and answer questions. Again, there was a large turnout of doctors and their spouses for both the program and the dinner in the evening.

This summarizes the activities of the Ninth Councilor District.

Report of the Tenth Councilor District C. C. Long, M.D., Councilor A. S. Koenig, M.D., Councilor

The physicians of the Tenth Councilor District were invited to a dinner meeting on November 6, 1973, as the guests of the Sebastian County Medical Society.

Mr. Paul C. Schaefer, Executive Vice President of the Arkansas Medical Society, was the principal speaker and he addressed the district on "Professional Standards Review Organization." His talk was informative and brought to the members of the Society the most recent developments in the activities of the Arkansas Medical Foundation and its role as the PSRO body for the State.

There were many questions from the audience and the purpose of the program was accomplished; namely, to keep the physicians of the Tenth Councilor District informed of the most recent developments in PSRO.

Report of the Council

C. C. Long, M.D., Chairman

The Council of the Arkansas Medical Society met on Sunday, August 12, 1973, at the Sam Peck Hotel in Little Rock and transacted the following business:

1. Voted to set up a Physician-Nurse Joint Practice Committee.
2. Went on record supporting an immunization project conducted by the State Health Department.
3. Approved a Mobile Multiphasic Screening Examination Program for Elderly Persons proposed by the State Health Department.
4. Approved Executive Committee action:
 - A. To sponsor a Mediterranean cruise proposed by INTRAV Travel Agency.
 - B. Continued efforts by the headquarters office to maintain liaison with the State Welfare Department.
5. Endorsed a "Hospital Utilization Project" to be offered to the hospitals by Arkansas Blue Cross-Blue Shield.
6. Disapproved a malpractice liability group plan proposed by Aetna Insurance Company.
7. Council approved November 25th as the date for the winter meeting of the Society.
8. Requested the Executive Committee of the Council to select two additional representatives for the Board of Directors of the Health Systems Foundation.
9. Endorsed AMA's Medigredit proposal.
10. Upon the request of the Woman's Auxiliary, endorsed a proposal for a State Juvenile Treatment Center.
11. Voted to disband the Society's Health and Medical Manpower Commission.
12. Decided to hold the 1975 Annual Session in the Arlington Hotel, Hot Springs, April 20-23.
13. Assured the Annual Session Committee that it was free to consider locations other than the headquarters hotel for the annual banquet in 1974.
14. Approved expenses for the Society's legal counsel to join the National Health Lawyers Association.
15. Approved Executive Committee and Budget Committee action increasing salary budget for the year.
16. Received Dr. Ben Saltzman's resignation as

a member of the Budget Committee and elected Dr. Kenneth R. Duzan to succeed him.

The Council met on Sunday, November 25, 1973, at the Sheraton Hotel in Little Rock and transacted the following business:

1. Elected Dr. Raymond Miller and Dr. W. Payton Kolb to serve as additional Society representatives to Arkansas Health Systems Foundation.
2. Approved travel expenses for the chairman of the Sub-Committee on Physical Fitness and School Health to attend a conference on school health.
3. Agreed to designate Society representatives to the Medicaid Drug Program Peer Review Committee.
4. Approved Society sponsorship of a Scandinavian trip by INTRAV to depart Little Rock on July 30, 1974.
5. Agreed to co-sponsor with Oklahoma and Kansas a two-hour, one evening hospitality suite during the AMA Clinical Meeting in California.
6. Approved hosting a luncheon every other month for the Joint Physician-Nurse Practice Committee.
7. Recommended that the By-Laws of the Arkansas Foundation for Medical Care be amended to include membership of osteopaths.
8. Approved the following nominees for the Regional Peer Review Committees of Paid Prescriptions, the carrier for the Arkansas Medicaid Drug Program:

Representatives:

Dr. Boyce West, Clarksville

Dr. G. Wayne Taylor, Jonesboro

Dr. John Trieschmann, Hot Springs

Dr. Joseph S. Robinette, Pine Bluff

Dr. Guy R. Farris, Little Rock

Alternate Representatives:

Dr. Kemal Kutait, Fort Smith

Dr. Charles Kemp, Jonesboro

Dr. Carl Northcutt, Stuttgart

Dr. Julian Foster, Little Rock
9. The Council approved proposed revision in the By-Laws of the Arkansas Foundation for Medical Care.
10. Decided to sanction a proposal that the

Neurosurgeons of the State organize as a specialty group within the Society.

11. Referred to the Budget Committee several requests for financial assistance from other organizations.
12. Approved the annual report of audit of the Arkansas State Medical Board.
13. Approved application of the Arkansas Foundation for Medical Care to apply for membership in the American Association of Foundations for Medical Care.
14. Voted to instruct the Society's delegates to support a resolution at the AMA Clinical Meeting calling for discontinuance of price controls on physicians.
15. Decided to ask the State Medical Board to follow developments on the threatened lawsuit against Springdale physicians because of statements that they refuse to treat Medicaid patients.
16. Gave its approval to a program by the Public Health Department on venereal disease control.
17. Heard lengthy discussion by representatives of the Benton and Boone County Medical Societies requesting that the Society take a stand of non-compliance on the PSRO provisions. Decision on the matter was referred to the Arkansas Foundation for Medical Care.

The Council met on Sunday, February 10, 1974, at the Sheraton Hotel in Little Rock and transacted the following business:

1. Approved previous Executive Committee action as follows:
 - (A) Authorized the Executive Vice President to write Wilbur Mills regarding the Wisconsin interpretation of Public Law 92-603, which requires physicians to obtain a "certificate of need" for the establishment of or any change in their medical practice.
 - (B) Heard a proposal by a representative of American Health Systems, Inc., to plan the organization of a Professional Standards Review Organization for the Arkansas Foundation for Medical Care.
2. The Council authorized expenses for two representatives to the AMA-AMPAC Workshop in Washington.
3. (A) At the request of the Auxiliary, the

Council authorized the Society's Committee on Mental Health to work with the Auxiliary Committee in Development of a proposal for a facility for the care of emotionally disturbed juveniles in the State.

- (B) Authorized legal counsel to communicate with the Auxiliary regarding the desirability of incorporating the Auxiliary as a tax-exempt organization.
4. Authorized the Executive Committee to appoint a committee to propose plans for observance of the Society's centennial year.
5. (A) Approved a request by C. R. Ellis for expenses up to \$250 for a Prayer Breakfast to be held during the Annual Session of the Society.
- (B) Authorized expenses for Dr. Ellis to attend a Medicine and Religion Conference in Chicago.
6. Heard a report from Dr. Glen Baker, Society representative on the Regional Medical Program Advisory Committee, and heard Dr. Baker discuss H.R. 12053 and its threat to make the delivery of medical care a public utility.
7. Approved the Society's budget for 1974 as presented by the Budget Committee.
8. Approved the loan of \$6,000 to the Arkansas Foundation for Medical Care by the Society; the loan to carry interest at the New York Prime Interest Rate at the time of granting the loan.

Report of the Executive Vice President

Mr. Paul C. Schaefer

The Arkansas Medical Society continues to grow slowly but steadily. Dues-paying members numbered 1,397 in 1973 against 1,382 in 1972. Affiliate members increased from 78 to 81 in the same period while life members decreased to 25 from 31 during the same period. The membership category showing the largest decrease was the "Interns and Residents Classification" which fell from 95 to 64. The Arkansas Medical Society continues to furnish 134 free subscriptions to the Journal of the Arkansas Medical Society to interns and residents. One thousand five hundred and sixty-seven physicians were members of the Arkansas Medical Society during 1973.

With the advent of Professional Standards Review Organizations under P.L. 92-603, the unity

of the medical organization will meet its greatest test. Physicians must exercise great self-restraint and be most understanding of the constraints put upon the reviewing bodies if the implementation of the law is not to tear medical organizations apart. Such destruction of the strength of medicine is precisely what its detractors in all branches of Government hope and plan for most fervently.

Implementation of the Foundation for Medical Care for the purpose of becoming the PSRO will occupy much of the time and energy of members and staff alike during 1974.

Your active participation is sincerely sought. The more you take part, the less oppressive the implementation of the law will be.

Budget Committee

H. W. Thomas, M.D., Chairman

The Budget Committee submitted the following budget for 1974. It has been approved by the Council.

INCOME		
<i>Budget Item</i>	<i>1974 Budget</i>	
Membership Dues	\$165,200.00	
Journal Advertising		
Local	\$12,300.00	
National	27,000.00	39,300.00
Booth Income		8,600.00
Annual Session Income		3,700.00
AMA Reimbursement		1,200.00
Miscellaneous & Rosters		400.00
Interest on Government Securities		11,800.00
Retirement (Employee Contribution)		575.00
Specialty Desk		750.00
INTRAV		900.00

		\$232,425.00
EXPENSES		
Salaries		
Society	\$63,760.00	
Public Relations	11,050.00	
Journal	13,350.00	
Exhibit	500.00	\$ 88,660.00
Travel & Convention		
Society	16,950.00	
Public Relations	2,700.00	
Journal	850.00	20,500.00
Taxes		
Society	3,520.00	
Journal	815.00	
Exhibits	815.00	5,150.00

Retirement		
Society	22,929.60	
Journal	4,046.40	26,976.00
Stationery & Printing		
Society	2,050.00	
Public Relations	50.00	
Journal	375.00	
Exhibits	75.00	2,550.00
Office Supplies & Expense		
Society	4,400.00	
Public Relations	50.00	
Journal	950.00	5,400.00
Telephone & Telegraph		
Society	2,135.00	
Public Relations	500.00	
Journal	150.00	
Exhibits	15.00	2,800.00
Rent		
Society	5,100.00	
Journal	900.00	6,000.00
Postage		
Society	6,750.00	
Public Relations	50.00	
Journal	1,650.00	
Exhibits	50.00	8,500.00
Insurance & Bonds		
Society	3,850.00	
Journal	850.00	4,700.00
Auditing		
Society	750.00	
Journal	150.00	900.00
Council Expense		800.00
Journal Printing		29,000.00
Annual Session		
Society	10,200.00	
Exhibits	2,100.00	12,300.00
Winter Meeting		1,100.00
Dues & Subscriptions		
Society	7,382.00	
Journal	250.00	7,632.00
Gifts & Contributions		
Society	874.00	
Journal	26.00	900.00
Woman's Auxiliary		1,200.00
Legal Services		
Society	3,800.00	
Journal	600.00	4,400.00
Special Committee		
Society	150.00	
Public Relations	150.00	300.00
Rural Health		500.00

Miscellaneous		
Society	20.00	
Public Relations	20.00	
Journal	.00	40.00
Freight & Express		
Society	12.50	
Public Relations	.00	
Journal	12.50	25.00
Office Equipment		750.00

		\$231,083.00

Report of AMA Meeting

December 1-5, 1973

Anaheim, California

Purcell Smith, Jr., M.D., Delegate

The AMA Clinical Meeting in December 1973 addressed itself to problems of PSRO, Federal wage and price controls over health care providers, and numerous other issues concerning physicians and the public. The agenda was the biggest for a Clinical Session in recent years. Other issues included malpractice problems, proposed improvements in health care delivery for migrant workers, and the method of election of members of the Board of Trustees.

There were ten resolutions concerning the PSRO Law, more than for any other item of business.

PSRO

The Reference Committee devoted more than four hours to testimony, and there was an additional two hours of discussion in the House of Delegates. The position of the AMA is reflected by Report EE of the Board of Trustees, as amended by the House of Delegates. Basically, the AMA position can be stated as follows:

1. That the medical profession remains firmly committed to the principle of peer review, under professional direction, and
2. That medical society programs of proven effectiveness should not be dismantled by PSRO implementation, and
3. That the Association suggests that each hospital medical staff, working with the local medical society, continue to develop its own peer review, based upon principles of sound medical practice and documentable objective criteria, so as to certify that objective review of quality and utilization does take place; to make these review procedures sufficiently strong as to be unassailable by any

outside party or parties; and that the local and state medical societies take all legal steps to resist the intrusion of any third party into the practice of medicine, and

4. That this House of Delegates, as individual physicians and through the Board of Trustees and its Council on Legislation, work to inform the public and legislators as to the potential deleterious effects of this law on the quality, confidentiality and cost of medical care; and the hope that the Congress in their wisdom will respond by either repeal, modification, or interpretation of rules which will protect the public.

The considered opinion of this House of Delegates is that the best interests of the American people, our patients, would be served by the repeal of the present PSRO legislation. It is also believed that this is consistent with our long-standing policy and opposition to this legislation prior to passage.

In adopting the above statement, the House made special note that the last paragraph of Report EE remains the same. That paragraph reads:

The considered opinion of the Board of Trustees and the Council on Medical Service is to recommend to the House of Delegates that the AMA continue to exert its leadership and support constructive amendments to the PSRO law, coupled with continuation of the effort to develop appropriate rules and regulations.

PHASE IV WAGE-PRICE CONTROLS

The House approved a Board of Trustees Report announcing AMA support for the American Hospital Association in its battle against proposed controls over acute care hospitals. Delegates also adopted a substitute resolution which directs the AMA to continue, "as a matter of high priority," to seek relief for physicians from wage-price controls "using all available administrative resources," and that "the Board of Trustees be authorized to institute appropriate legal action when so advised by legal counsel."

PHYSICIANS AND HOSPITALS AND MEDICAL SCHOOLS

Pre-Admission Certification — The House adopted a resolution directing the AMA to take all steps necessary to prevent enactment of regulations mandating hospital pre-admission certification, and to determine whether such regula-

tions would be in violation of Medicare law. A resolution, which would have the AMA request the Secretary of the HEW not to allow the publishing of pre-admission certifications in the Federal Register, was referred to the Board of Trustees and the Council on Legislation.

Funding Medical Education — Report C of the Board of Trustees describes several studies of the cost of medical education and its relation to the cost of medical care that are presently underway, and points out that the Council on Medical Education is closely monitoring the results of such studies with a view toward future actions.

Quality Assurance Program — The House adopted a resolution that offers the American Hospital Association the cooperation of the AMA in deliberations on the AHA'S Quality Assurance Program. The AMA will seek the elimination of features it considers undesirable. A final resolve puts the AMA on record as disapproving the QAP in its present form.

Problems with Third-Party Rounds — A report of the Council on Medical Education and the Council on Medical Service with suggestions to minimize problems arising from the use of private patients in teaching programs was adopted by the House, and referred to the Judicial Council and the AMA Legal Department, with instructions to file a report through the Board of Trustees for the 1974 Annual Meeting.

PHYSICIANS AND THE PUBLIC

Health of Migrant Workers — Development of a possible nationwide health insurance program for migrant workers is one of several proposals contained in Council on Medical Service Report C approved by the House. The report states that such an insurance program is possible, and adds that there is a need for migrant health advocates, who would be paid for their services rather than be volunteers. The Council on Medical Service is instructed to develop a version of such an insurance program.

Confidentiality of Records — The House adopted Report D of the Council on Medical Service which describes efforts to find practical solutions to problems relating to maintaining the confidentiality of patient records. The House further instructed the Council to prepare model legislation to preserve confidentiality as a guide to possible state legislation. Also adopted was

Resolution 41 which puts the AMA on record in opposition to the violation of the confidentiality of patient records by government agencies under all circumstances.

Alcoholism — Under Resolution 30 adopted by the House, the medical treatment and admission of alcoholics would be improved. The resolution recommends to the American Hospital Association that it urge member hospitals to liberalize admission policies for alcoholics where necessary; urges physicians to abstain from using the names of other pathological conditions in lieu of alcoholism, urges the Joint Commission on Accreditation of Hospitals to implement the intent of the Resolution as one of its requirements for approval, and urges insurance companies and prepayment plans to remove unrealistic coverage limitations for treatment of alcoholics.

National Blood Program — The concept of the proposed AMA plan to implement the government's National Blood Policy by organizing blood banks and transfusion facilities within a national system that retains regional and local responsibilities and authority was endorsed by the House (Report Z of Board of Trustees).

Definition of Death — Because of complex legal ramifications, the House adopted a policy position that, at present, the statutory definition of death is not desirable or necessary, that state medical associations urge their legislators to postpone enactment of definition of death statutes. The House also affirmed the following statement: "Death shall be determined by the clinical judgment of the physician using the necessary available and currently accepted criteria."

The Dying Patient — The House adopted the following statement to serve as a guideline for physicians confronted with ethical problems related to euthanasia (mercy killing) and death with dignity:

"The intentional termination of the life of one human being by another — mercy killing — is contrary to that for which the medical profession stands and is contrary to the policy of the American Medical Association.

"The cessation of the employment of extraordinary means to prolong the life of the body when there is irrefutable evidence that biological death is imminent is the decision of the patient and/or his immediate family. The advice and

judgment of the physician should be freely available to the patient and/or his immediate family."

ASSOCIATION AND INTERNAL MATTERS OF THE HOUSE

Terms of Service of Trustees—Proposed amendments to the By-Laws which would have limited members of the Board of Trustees to a maximum of two full terms of three years each were not adopted by the House; trustees will continue to serve three full terms of three years each.

Method of Electing Trustees—In a related action, the Delegates approved resolutions which would allow candidates for the Board of Trustees to run at large, rather than for designated "slot" positions as is presently done.

Specialty Representation in House—The House took several actions related to direct representation of national medical specialty societies in the House of Delegates. An open hearing is planned at the 1974 Annual Meeting. Resolutions calling for the rejection of direct representation by the specialty societies were referred to the Council on Constitution for further study.

Professional Liability—Report DD of the Board of Trustees, which summarizes the development of the new Medical Liability Commission formed by the AMA, and AHA, and several national medical specialty organizations, was endorsed by the House. Delegates further directed that the Board of Trustees "grant the highest priority for financial and organizational support" of the commission.

The Board of Trustees will request that the Commission give some priority to basic research in the field of medical liability, and will urge the present Secretary of HEW to consult and cooperate with the commission.

The action also puts the House on record as urging all delegates, state and local medical associations to support the new commission, and to submit to it any appropriate comments, suggestions or ideas for easing malpractice problems.

Renal Dialysis—Acting on Report J of the Council on Medical Service and on several resolutions, the House adopted a strong policy position on renal dialysis and transplant procedures under Medicare. The report and resolutions objected to the "interim regulations" issued by the Federal Government in respect to renal dialysis and transplant under Medicare, since the regulations establish what is tantamount to a

maximum fee schedule on a national basis for professional services and, in effect, dictate on a national scale the method by which certain kinds of medical care are rendered.

Under actions taken by the House, the AMA will strongly protest—and seek to rescind—the interim regulations; request that the Federal Government return to existing systems of determining medical necessity for treatment and setting fees; and—with consultation from concerned medical specialty societies—work with the government in redrawing the interim regulations.

The House referred to the Council on Medical Service a resolution urging AMA to oppose wide differences in fees for medical services performed by equally qualified physicians who practice in different geographic areas of a state. It adopted a report recommending that summaries of court decisions on informed consent be made available to physicians on request, rather than the compilation of model guidelines since court interpretations of informed consent vary from one jurisdiction to another. It adopted a substitute resolution calling for the Board of Trustees, the Interns and Residents Business Section, the Council on Medical Service, and the Council on Medical Education, to develop principles and guidelines for agreements between House staff and their institutions, and to explore the development of a model contract for use by institutions with graduate medical education programs. Finally, the House referred to the Officers of the Interns and Residents Business Section and the Board of Trustees a resolution seeking AMA support for an exemption from Federal taxes of the first \$3,600.00 of annual income paid post-doctoral trainees by institutions accredited by the AMA Council on Medical Education.

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Arkansas Drug Abuse Authority Amiel Chudy, M.D., Representative

The State of Arkansas now has a Drug Abuse Authority and a Drug Abuse Commission. The Drug Abuse Commission serves as an advisory group to the very active and solicitous Arkansas Drug Abuse Authority.

There was some difficulty in getting a quorum of the Drug Abuse Commission to facilitate the embryonic development of such a wonderful drug investigative committee. The committee was well represented by law enforcement, legal

representatives, citizens-at-large and the medical profession. I feel that the Arkansas Drug Abuse Commission has done a remarkable job for the State of Arkansas in conjunction with the First Offenders' Program and the excellent survey of the schools and towns throughout the State of Arkansas for the drug abuse problem. Credit should go to Mr. Miles Waldron, coordinator for the State of Arkansas Drug Abuse Authority. It is through his standing research, backbreaking work, and tireless endeavor that this program has gotten its foot into the door in the activities in the State of Arkansas.

**Report of the Arkansas State Medical Board
January 1, 1973 - January 1, 1974
Joe Verser, M.D., Secretary**

The Secretary of the Arkansas State Medical Board makes the following report of the activities of this board since the last meeting of the Arkansas Medical Society:

- The officers and members are as follows:
Hugh R. Edwards, M.D., President
Ross Fowler, M.D., Vice-President
Joe Verser, M.D., Secretary-Treasurer
Frank M. Burton, M.D.
John F. Guenthner, M.D.
George F. Wynne, M.D.
C. Stanley Applegate, Jr., M.D.
H. Elvin Shuffield, M.D.
Bascom P. Raney, M.D.
Eugene R. Warren, Attorney

A yearly financial report of the board's activities, prepared by Johnston, Freeman & Jones, C.P.A., was sent to and approved by the Council of the Arkansas Medical Society.

The board investigated every case of violation of the Medical Practices Act reported to the secretary during the year. Following is a summary of the board's proceedings.

Physicians registered for 1973:

Resident	1,955
Non-Resident	1,478
Physicians licensed by examination	117
Physicians licensed by reciprocity	57
Physicians certified to other states	152
Licenses revoked for non-payment of annual registration fee	26
Licenses suspended for non-payment of annual registration fee	59
Licenses suspended for violation of Medical Practices Act	2

Cases pending for violation of Medical Practices Act	5
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**Arkansas State Medical Board
Balance Sheet
June 30, 1973**

ASSETS			
Cash in banks —			
Bank of Weiner, Weiner, Arkansas			
Certificate of Deposit #362	\$ 8,553.71		
Certificate of Deposit #392	2,746.35	\$11,300.06	
Cash on hand			37.50
Bank of Harrisburg, Arkansas			
Checking Account	\$42,478.67		
Certificate of Deposit #519	12,999.70	55,478.37	
Office equipment			3,187.27
TOTAL ASSETS			\$70,003.20
LIABILITIES AND SURPLUS			
LIABILITIES			
Withholding and FICA taxes deducted and unpaid for the quarter ended June 30, 1973			\$ 430.83
SURPLUS			
Balance at beginning of year	\$58,273.01		
Add: Excess of receipts over disbursements for year ended June 30, 1973 (Schedule 2)	\$11,381.02		
Less: Increase in payroll taxes withheld but not remitted at June 30, 1973	(81.66)	11,299.36	69,572.37
TOTAL LIABILITIES AND SURPLUS			\$70,003.20

**Summary of Arkansas State Department of
Health Activities**

J. A. Harrel, Jr., M.D., M.P.H., Director

The Arkansas State Department of Health is one of the thirteen major State agencies with a twelve member State Board of Health acting in an advisory capacity. There are five major bureaus within the department. These are: Administrative Services, Medical Care Services, Health Facility Services, Environmental Services and Consumer Protection Services.

The demand for quality health services for all citizens, both in the private and public medical sectors, has brought about continued growth and expansion of services of the State Health Department.

The expansion of educational services continued with new literature and audio-visual material purchased and developed. A total of 8,000 requests for 1,250 films seen by 161,527 people. Medical Self-Help films were scheduled 253 times

and used to train 28,955 people in Medical Self-Help.

Vital Statistics for the calendar year of 1972 recorded a total of 33,077 live births, a rate of 16.0 per 1,000, and 21,663 deaths, a rate of 10.4 per 1,000.

There was an increase in screening for diabetes with 6,043 individuals tested and 38 new cases of diabetes discovered.

A throat swab kit for detection of "strep throat" was sent to physicians. From 7,611 specimens, 1,501 were positive.

A total of 12,125 cancer patients were "followed" by their respective cancer registries and nurses "followed" an additional 570. Cancer registries are connected with Chronic Disease Control. Tumor clinics examined 6,435 with 824 diagnosed as malignant.

The nursing staff made 794,317 visits to patients who could not get to a health department, gave 276,658 immunizations, obtained 339,069 specimens for laboratory tests and screened approximately 1,600 children per month through pediatric clinics.

Family planning and maternity care has resulted in an increase of patient visits to our clinics. There were 12,914 visits to maternity clinics and 35,665 visits to family planning clinics. A total of 26,803 Pap smears for cervical cancer were made through these clinics.

Hearing tests were given to 108,314 preschool and school age children, and 150,340 vision tests. There were 12,940 child evaluations and health conferences; 7,694 of these were screening services to children from "Aid for Dependent Children" (AFDC) families. There were 26,445 child health clinic visits recorded.

There were 584 handicapped children evaluated, 884 children were examined for speech and hearing problems, of which 74 were fitted with hearing aids, and 565 children were provided dental care, and 2,601 speech language and hearing therapy classes were conducted.

A total of 23 part-time dentists provided care to 2,375 patients through the local Health Departments. A total of 123 Arkansas communities now fluoridate the water supplies and a significant decrease in dental decay has been noted.

A law requiring laboratories to report positive tests for venereal disease was passed and a

fund was set up for control activities. Since most cases have gone unreported, it is estimated that 140,000 Arkansans contracted gonorrhea in 1973.

An inward WATS line was established to allow immediate reporting of communicable diseases so that steps could be taken to prevent an increase in cases.

Identification of disease outbreaks and surveillance of immunization levels enabled public health personnel to identify real and potential locations of disease outbreaks.

A program of general hospitalization for tuberculosis patients has been established. When the Booneville Sanatorium was closed, eight hospitals were gradually put in operation under this program. Now tuberculosis patients are able to return to their families and productivity at a much earlier date than previously was expected. The eight hospitals operate in conjunction with 61 out-patient chest clinics.

A strong thrust to control rabies in household pets has been a major effort of the Division of Veterinary Public Health. A total of 16,841 cats and 120,759 dogs were vaccinated in 1973. Fortunately, a human death from rabies has not occurred in Arkansas since 1957. There was a total of 1,568 human exposures to animal bites and 3,360 single doses of rabies vaccine given last year.

Small meat plants under the supervision of the Division of Meat Inspection provide approximately 165 million pounds of beef, veal and pork annually.

Better emergency medical care was assured by the training of 391 persons in a 72-hour course and 386 in a 20-hour course. A 16-hour course was presented to 29,424 students and 1,651 persons participated in a cardiopulmonary resuscitation course.

Although the Emergency Medical Stockpile Program was curtailed, 60 hospitals are continuing activities in conjunction with Emergency Health Services.

Specimens received from other divisions greatly increased the activities of the Public Health Laboratory. Over 55,000 specimens for gonorrhea culture were brought in (3,598 were positive); 18,533 specimens for tuberculosis and 1,775 for fungus inspection were handled; 130,847 specimens for syphilis were examined; 3,200 examinations were made for intestinal parasites

and 1,782 animal heads were examined for rabies.

Under the Licensure Program for Hospitals and Nursing Homes, 2,200 inspections were made and 78 plans were reviewed for new construction or additions to existing facilities.

On-site construction inspections totaling 400 were made on 119 facilities that may be entered and used by the physically handicapped.

Sixty new applicants were given the nursing home administrator's examination and 400 renewal licenses issued.

Under the Medicare Program, 40 non-accredited hospitals, 9 extended care facilities, 95 home health agencies and 10 independent laboratories were resurveyed for participation in the Health Insurance Program under the Social Security Administration; 297 consultations were made to correct deficiencies.

A total of 210 nursing homes, 98 hospitals and 17 other facilities, such as specific centers and rehabilitation facilities, were licensed.

The University of Arkansas Medical Center, Arkansas Baptist Medical Center and Sparks Regional Medical Center were licensed by the Division of Radiological Health to utilize nuclear-powered pacemakers.

Environmental monitoring of radiation levels continued around Arkansas Nuclear One.

A total of 29 law enforcement officers were instructed in use of breath-testing equipment; 23 had a refresher course, 15 new certified installations for breath testing brought the total to 103; operating these installations are 787 certified personnel. A total of 268 field visits and 1,436 test samples were prepared and processed on these instruments.

Occupational Health activities included evaluation of work places with potential hazards such as toxic liquids, vapors, gases, metals, dusts, fumes and noises.

Since last year, the Division of Drug Control has made 40 investigations involving legitimate handlers of controlled substances; issued 354 receipts for drug destruction, making a total of 12,000 individual prescriptions accounted for and destroyed. Many confiscated drugs also were surrendered to the Drug Laboratory.

Poison Control activities focused on use of organophosphate chemicals, since the ban on

DDT, cholinesterase monitoring and accident reporting.

In Arkansas, 4 Federal agencies, 9 State agencies and 2,200 private agencies and individuals are involved in the accident reporting system. Accident reporting directly involves investigation for arsenic; seven such incidents have been reported and investigated.

A total of 537 samples of meat, milk, water, human fluids and tissues, soil and ambient air were analyzed for pesticide content. To determine prevalence and effects of environmental pesticides data relating to all samples is recorded.

During the floods in the early part of 1973, engineering staff participated in flood damage surveys.

For adequate protection of food, a total of 688 plans for food service establishments were reviewed; 730 inspections were made in 23 counties without sanitarians; 549,293 pounds of food unfit for consumption were removed from channels of trade.

A total of 1,153 licenses were issued to soft ice cream establishments, frozen dessert plants, manufacturing milk plants, milk producers, pasteurization plants, testers, graders and samplers and 73 out-of-state pasteurization and frozen dessert plants were licensed to sell in Arkansas.

Sanitary inspections of producing dairies and milk processing plants totaled 1,395; 868 tests were made on processing plant equipment. A total of 4,247 dairy product samples were collected to be analyzed.

Master plumber licenses totaled 1,305 and journeyman plumber licenses reached 1,233.

The Mobile Home Standards Act, Act 510 of 1973, became law. This is the first thrust of the Health Department into housing.

Licensing of septic tank pumpers will help close another of the pollution loopholes.

Under a Food and Drug Contract, the State is assuming many of the Federal agencies' responsibilities in protecting you from possible food contamination and adulteration.

During the spring flood disasters, mosquito surveys were made in 15 eastern and central counties to determine larva counts, biting rate counts and light trap collections to assess potential disease outbreak areas.

Since January 1, 1973, a total of 4 State parks,

12 National forest use areas and 25 Corps of Engineers public use areas have been surveyed.

Inspection and permitting of water craft resulted in the issuance of 317 new decals (meeting criteria of Act 147, 1965) and 714 permits.

The Community Improvement Program (rat control) has made surveys of potential rat problem areas to determine changes in standards of control and methods of implementation.

The Division of Sanitarian Services was established to coordinate the duties of local sanitarians and to secure the services of sanitarians for each of the 75 counties.

The Arkansas Drug Abuse Authority was set up as a comprehensive information system regarding drugs and drug abuse. It will be reciprocal with other states.

Plans were begun for a statewide program of treatment of persons with both potential and documented cases of drug abuse problems.

**Report of Arkansas Regional
Medical Program
Ross Fowler, M.D.**

Member of Regional Advisory Group

ARMP activities were curtailed during 1973 when it was announced that the program would be terminated in July 1973. A "phase out" period was followed by release of RMP funds in September 1973, extending the program to July 1974.

With funds available, the Planning Committee decided to focus on (1) local planning, (2) quality assurance and (3) hypertension, for the period of funding to July 1974.

ARMP project priorities and budget proposals totaling \$660,896 were submitted to RMP for January 1 through June 30, 1974.

On January 11, 1974, Dr. C. W. Silverblatt submitted his resignation as Coordinator of the Arkansas Regional Medical Program, effective February 15, 1974.

On January 22, 1974, Dr. Silverblatt spoke before the ARMP Executive Committee on the proposed new health legislation bill, HR 12053 (National Health Policy and Health Planning and Development). A series of slides were presented outlining this legislation and ways in which it could pertain to the Arkansas Regional Medical Program. Dr. Silverblatt urged that

steps be taken for ARMP to try to become the Health Service Agency in Arkansas.

A Regional Advisory Group meeting of the ARMP was held February 8, 1974.

I urge each member of the Arkansas Medical Society to study HR 12053 for its possible impact on the practice of medicine.

**Report from Medical Education
Foundation for Arkansas
Robert Watson, M.D., President**

This Foundation was formed in 1962, for the purpose of supporting any worthwhile means to better medical education in Arkansas.

It is primarily financed through a \$5.00 annual assessment from Society dues paid by each member of the Arkansas Medical Society. Supplemental income is received in the form of memorials and other donations, together with investment income from high yielding government secured mortgage bonds.

From its beginning, it has been the policy of the Board of Directors of the Medical Education Foundation for Arkansas that we would each year "spend a little and save a little," hoping that through prudent management, our investment funds would, in time, have an annual dividend income such that the Medical Education Foundation for Arkansas could be a self-supporting venture and no longer need financial supplements from the State Society.

Presently, toward this end, we have \$40,000.00 invested in government pledged securities that during the calendar year 1973 earned approximately \$3,000.00 in interest income.

Since its beginning in 1962, over \$55,000.00 has been contributed to the University of Arkansas School of Medicine from the above sources. Fifty-thousand dollars of this money has received Federal matching at the rate of 9 to 1, supplementing other sources of funds available each year for needy medical students. Due to these varied sources of income for use as student loans, every needy student has been provided with generous financial support.

It is the Board's request that the Foundation continue receiving annual support toward eventually becoming an independent program that would always have assured income to provide financial support to any cause to help to better medical education in Arkansas.

Arkansas Family Planning Council

E. Stewert Allen, M.D., Representative

The Arkansas Family Planning Council is the coordinating agency, and the principal Department of Health, Education, and Welfare grantee, for family planning activities in Arkansas. Clinical services are principally, but not exclusively, provided by the Health Department; outreach is principally a Community Action Agency activity. At present, approximately 70% of all new patients are a result of outreach and without it, drop-outs from the program would be high.

Of the 102,466 medically indigent women considered to be in need of subsidized family planning services, as of November 30, 1973, 33,055 had been registered in the program, and 27,090 had received service in the last year. The number served has been increasing at about 1,000 per month. Present funding is \$1,700,000 federal money, with 10% in-kind local contribution.

At present, outreach covers all but 11 of the 75 counties, and only one has no clinic. During the coming year, additional money is expected from Title IV-A for outreach, and Title XIX (Medicaid) for medical services, and full coverage of all areas is planned.

Cost per patient per year for outreach is \$57, slightly below the national average established by three independent surveys.

The success of this program has been due very largely to the cooperation of the physicians who have given time to the clinics. Its future expansion will be dependent on the time they are able to make available.

Voluntary birth control as a means of limiting families to desired size has been widely accepted in this State, with no observable opposition. This is expected to relieve the poverty cycle as the present younger generation matures. New legislation, which permits service to minors, will reduce the teenage illegitimacy problem; this is now a target for development by the outreach agencies.

Report from the Arkansas Council for Health Careers

Bob Waters, Executive Director

The Arkansas Council for Health Careers was incorporated in October 1971. The Council was organized through the diligent efforts of Mrs.

A. S. (Coc) Koenig, who, at that time, was serving as Chairman of the Health Manpower Committee for the Woman's Auxiliary to the Arkansas Medical Society and is presently State President of that organization.

Conceptually, the Arkansas Council for Health Careers is not unique. There are approximately 36 Health Career Councils in the United States. The Council is mandated by its By-Laws to coordinate, develop, and promote programs and activities that would provide qualified health manpower for our State.

The ACHC serves as a clearinghouse where interested individuals can gain reliable information about health career opportunities. Working with guidance counselors, individuals and organizations, the Council is working toward a better understanding of the academic background and aptitude one must possess to undertake a health career.

According to the Director of the Arkansas Council for Health Careers, Bob Waters, "before an all out recruitment program can be launched, we must first have the training facilities available to accommodate additional students."

One of the current activities of the Council is a proposed Health Needs Survey. This survey will inventory approximately 60 separate health career categories and project our State's needs for additional manpower through 1980. Once this survey is complete, the Council will begin work on implementation of the survey results, whether it be enlarging present training facilities to handle a larger number of students or creating new training programs to fill needs that perhaps had been overlooked.

Another area of interest for the Arkansas Council for Health Careers is the maldistribution of health manpower. It hopes to have underway by September a computerized state-wide Health Manpower Distribution program which will be nothing more than a free placement service for graduating health personnel. Once operative, the program can perhaps create a better balance between trained, qualified health personnel, and a community's needs.

The Arkansas Council for Health Careers has proposed a state-wide Health Job Fair. The fair will bring together students currently enrolled in Health Manpower Training programs and some 50 to 60 cities in Arkansas considered not

to be metropolitan by design. This fair will give the student an opportunity to meet with and talk to doctors, hospital administrators, and city officials who can explain the benefits of working in their community. Although the Council realizes this Health Job Fair is not a panacea for proper health manpower distribution, it does feel it is a step in the right direction.

The Arkansas Council for Health Careers has just recently completed a Health Educational Resources Catalog which, with the help of the Woman's Auxiliary, will be in every high school in our State by mid-March. The resources catalog may be used by guidance personnel as a reference book which gives a complete listing of every health career training program in our

State. The listing contains such information as length of the training program, prerequisites, enrollment date, tuition, availability of financial aid, and the type of credentials the student receives upon completion of the program. The popularity of the catalog is increasing daily and although only 450 will be made available this year, the Council realizes that number will fall short of the number requested.

If further information about the Arkansas Council for Health Careers is desired, feel free to contact:

Bob Waters
Executive Director
P. O. Box 2081
Fort Smith, Arkansas 72901



House of Delegates Business Affairs

The following Constitutional amendments and resolutions are brought to the attention of individual members and county medical societies. The items printed here represent those received in time for publication in advance of the meeting. They will be referred to reference committees. Open hearings by the reference committees are to be held on Sunday afternoon, April 28th, immediately following the session of the House of Delegates. All members of the Society are urged to participate in the open hearings of the reference committees. The reference committees want expressions of opinion from the membership.

Constitutional Amedments

The following proposed amendments to the Constitution and By-Laws were approved by the House of Delegates during the 1973 meeting. They will be presented to the House of Delegates for final vote at the meeting on Sunday, April 28th.

A. Chapter VII, Section 2, delete present section and substitute:

Section 1. Each councilor shall be organizer, peacemaker and censor for his district. The two councilors in each district shall be designated "senior" or "junior" on the basis of length of tenure.

Section 2. A meeting of the members in each councilor district shall be called by the councilor at least once each year within two months of the Annual Session for the purpose of organizing component societies where none exists, for inquiring into the condition of the profession, and for informing, improving, and increasing the knowledge and zeal of the component societies and their members.

Section 3. The councilors shall jointly prepare and submit to the Council prior to the Annual Session a written report of their work and of the condition of the profession within their district.

Section 4. The necessary traveling expenses incurred by each councilor in the line of the duties herein imposed may be allowed

on submission of a properly itemized statement.

B. Chapter VI, Section 3, add as a second paragraph:

The vice presidents shall be assigned by the President of the Society as ex-officio members of certain committees of the Society. The vice presidents' responsibilities will be to stimulate, to guide, to maintain liaison, and to otherwise assist the assigned committees and their respective chairmen in the performance of their activities. In no instance will the vice president usurp or supplant the committee chairman in his responsibilities. The vice president shall not have a vote in the affairs of the committee to which he is assigned under provisions of this section.

C. Article III, Component Societies, to read:

Component societies shall consist of those county medical societies which hold charters from this Society; provided, however, that there may be a chartered society known as the "Student, Intern and Resident Society" as provided in the By-Laws.

D. Article IV, Section 2, Active Membership. Change the last sentence in this paragraph to read:

The eligibility requirements set forth in the preceding sentences are not to apply, however, to members in good standing in any component society at the time of the adoption of this Section (Adopted, House of Delegates, 1937 Annual Session) nor to the members of the specially chartered "Student, Intern and Resident Society."

E. Article V, House of Delegates, amend by adding at the end of the paragraph:
and (4) one delegate from the "Student, Intern and Resident Society."

F. Chapter I, Section 6, of By-Laws (Affiliate membership for interns and resident). Delete present section and substitute the following: Special membership for Students, Interns and Residents

1. An annual special membership shall be granted to bona-fide students of medicine at the University of Arkansas School of Medicine and to Interns and Residents within the State of Arkansas who are physicians, provided that they are fully or partially excused from the payment of county society dues, not to exceed ten percent of the dues charged active members of the Society, and provided that the request for exemption is transmitted through a component society of the Arkansas Medical Society. The requirement for active membership prior to exemption shall be waived for such special members.
2. The special members resulting from this section will comprise a single component group of the State Society similar to a county society, shall have privileges of speech, may serve on committees, will receive the Journal of the Arkansas Medical Society and shall be entitled to one voting representative in the House of Delegates.

Resolution

Jefferson County Medical Society

The Arkansas Medical Society affirms the following principles:

1. That the medical profession remains firmly committed to the principle of peer review under professional direction and;
2. That Medical Society programs of proven effectiveness such as tissue committees, record committees, hospital staff privileges and others should not be dismantled or duplicated by PSRO implementation and;
3. That the Association suggests that each hospital medical staff, working with the local Medical Society, develop its own peer review based on principles of sound medical practice and documentable objective criteria, so as to certify the objective review of quality and utilization does take place to make these review procedures sufficiently strong as to be unassailable by any outside party or parties and;
4. That the local and State Medical Societies take all legal steps to resist the intrusion of

any third party into the practice of medicine and;

5. That this House of Delegates, as individual physicians and through the officers of the Society and its Council on Legislation, work to inform the public and its Congressional representatives as to the potential deleterious effects of this law on the quality, confidentiality and cost of medical care.

Be it resolved that the considered opinion of this House of Delegates is that the best interest of the people of Arkansas, our patients, would be served by the repeal of the present PSRO legislation.

Resolution

Miller County Medical Society

Whereas, Public Law No. 92-603 (PSRO) has coerced the physicians of the Arkansas Medical Society by threat of withholding Federal funds to hospitals and to patients, and/or threat of third party intervention into forming a parallel organization (Arkansas Foundation for Medical Care) whose purpose is to implement and administer that law, we, the members of the Arkansas Medical Society, resolve that the following information should be made known to the Congressional representatives of the State of Arkansas, to the American Medical Association, to the Secretary of Health, Education and Welfare, and to the public:

- (1) We consider that Public Law No. 92-603 (PSRO) is not in the best interest of our patients in the State of Arkansas and of the United States of America, and we actively seek repeal of that law.
- (2) The fact that we have been coerced into forming an organization to administer Public Law No. 92-603 (PSRO) should by no means be construed as approval of that law.

Resolution

Union County Medical Society

Resolved, that the Arkansas Medical Society actively work for the repeal of Peer Services Review Organization legislation while fulfilling the legal requirements of the current law.



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THE JOURNAL OF THE *Arkansas* MEDICAL SOCIETY

Vol. 70 No. 11

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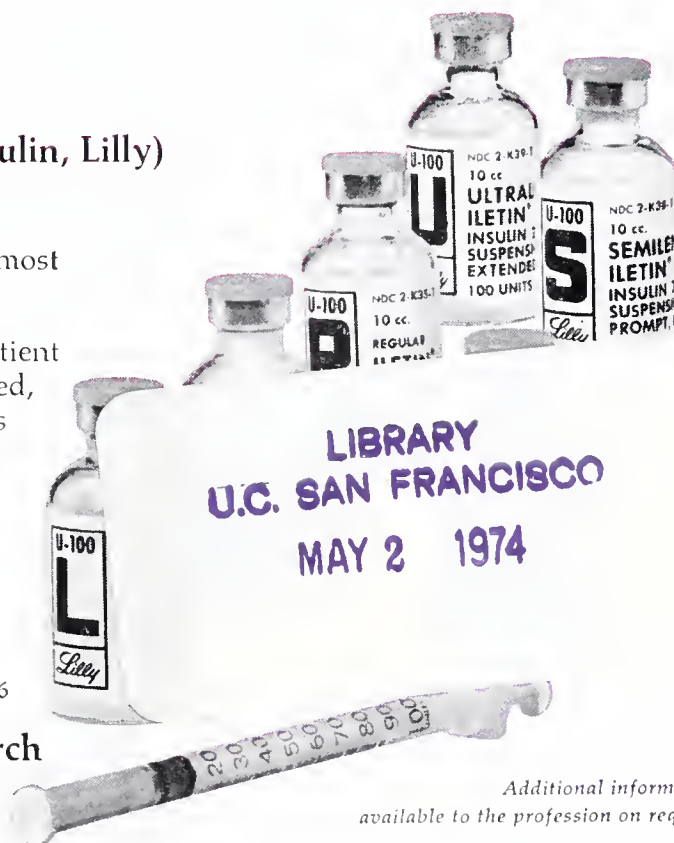
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Notice on Form 3579 to be sent to Arkansas Medical Society, P. O. Box 1208, Fort Smith, Arkansas 72901. Published monthly under direction of the Council, Arkansas Medical Society, Volume 70, No. 11. Subscription \$2.00 a year. Single copies 50 cents. Entered as second class matter, May 1, 1955, in the post office at Little Rock, Arkansas, under the Act of Congress of March, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized August 1, 1918. Second-class postage paid at Little Rock, Arkansas.

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The Management of Ear and Upper Respiratory Tract Infections*

James B. Snow, Jr., M.D.**

Ear and upper respiratory infections are common clinical problems. The variety of these infections is very great. Each type of infection requires individual management. Considerable seasonal variation occurs. Epidemics occur, and experience gained during an epidemic may be very helpful in managing subsequent victims of the epidemic.

The most common ear infection during the summer months is external otitis. External otitis is often initiated by the presence of water in the ear canal from swimming or showering. There is often some cerumen or debris in the ear canal that acts as a dam. The water remains in the ear for a prolonged period and results in maceration of the skin of the canal. A diffuse cellulitis of the skin of the ear canal follows.

The etiology of these infections has in the past been attributed to fungal infections, but actually they are rarely a primary fungal infection. The vast majority of them are due to a staphylococcus or gram-negative bacillus. Unless there is definite evidence of fungal infection, antibacterial treatment is employed.

The topical application of antibiotics is efficacious and rational. In view of the predominance of *Escherichia coli*, *Pseudomonas aeruginosa* and *Bacillus proteus* as the causative microorganisms a combination of neomycin and polymyxin is an appropriate choice. Often the main problem in treatment is the application of the topical antibiotic to the infected skin. There may be purulent debris and cerumen that partially or completely occlude the ear canal. This debris must be removed to prevent further maceration of the canal and to allow the antibiotic solution access to the infected area. Gentle re-

moval of this debris by the use of suction and cotton applicators is an important part of the treatment. Swelling of the skin of the ear canal may be great enough to prevent introduction of any medication. Gentle insertion of a gauze wick allows introduction of the ear drops by the capillary action of the gauze fibers. In addition to neomycin and polymyxin, hydrocortisone or another dermatologically active corticosteroid is used to reduce the swelling promptly and appears to shorten the period of severe pain. Reduction of the swelling allows the ear drops to penetrate to the depth of the ear canal.

Systemic antibiotics are usually not necessary. If there is a spreading cellulitis about the ear, a systemic antibiotic is employed. This cellulitis is usually of staphylococcal origin and responds promptly to penicillin or erythromycin. Resistant strains of these "street" or non-hospital staphylococci are rare.

In addition to the generalized cellulitis of the ear canal, external otitis may occur in the circumscribed form as a furuncle of one of the hair follicles of the cartilaginous portion of the canal. These furuncles may be extremely painful. They are very little influenced by either systemic or topical antibiotic therapy. Dry heat hastens their resolution and makes the patient more comfortable. Incision carries the risk of inducing a perichondritis of the pinna. Therefore, these infections are allowed to drain spontaneously. Both generalized and circumscribed external otitis are sufficiently painful to merit codeine by mouth for a 1 to 2 day period.

Individuals who have had external otitis are likely to develop it again. After swimming, displacement of the water in the canal by 10 drops of isopropyl alcohol is of prophylactic value.

The differential diagnosis between external

*Presented at the Annual Meeting of the Arkansas Medical Society at Hot Springs, Arkansas, on April 27, 1971.

**From the Department of Otorhinolaryngology, University of Oklahoma Medical Center, 800 N.E. 13th Street, Oklahoma City, Oklahoma 73190.

otitis and acute otitis media is frequently a problem. The history of predisposing upper respiratory infection in the case of otitis media or recent swimming in case of external otitis may be of help. The presence of itching and pain prior to a loss of hearing indicates external otitis. Drainage from the ear without relief of pain suggests external otitis. A mucoid discharge suggests a middle ear infection. Normal or near normal hearing indicates external otitis; however, if the hearing is normal, the tympanic membrane can ordinarily be seen.

In managing infections of the upper respiratory tract, it is important to bear in mind the continuity of the mucous membrane lining the entire respiratory tract. The respiratory tract consists of a continuum of epithelial lined passages which are relatively large in some areas and quite small in others. There are no interruptions of the mucous membrane lining; but there are constrictions in certain areas, and in certain areas the mucous membrane has differing characteristics. Some of these constrictions are physiologically closed most of the time. For example, the Eustachian tube is closed most of the time and opens briefly on swallowing several times a minute. The ostia of the paranasal sinuses are marked narrowings in the lumen. At the junction of the nasal cavity and the paranasal sinus, there is an abrupt change in the character of this continuous mucous membrane. There are numerous glands and vascular spaces in the nasal mucous membrane and a paucity of these structures in the paranasal sinus mucous membrane. In inflammatory reactions the mucous membrane on the nasal side of the ostium swells massively and occludes the ostium. Rational management of the sinusitis includes the promotion of drainage from the sinus by reducing this swelling.

There appears to be three possible processes in the pathogenesis of acute otitis media. Each depends on the continuity of the mucous membrane of the respiratory tract. Bacteria may reach the middle ear through the lumen of the Eustachian tube or by the spread of cellulitis or thrombophlebitis in the lamina propria of the mucous membrane. In each instance the mucous membrane of the Eustachian tube becomes edematous. Ventilation and equalization of pressure within the middle ear ceases. A rela-

tive negative pressure develops in the middle ear and is promptly followed by a transudate of fluid from the subepithelial vessels of the mucous membrane. With a bacterial infection in the middle ear, an exudate of serum, polymorphonuclear cells, etc., is produced, and a positive pressure in the middle ear develops. Bulging of the tympanic membrane results.

The management of these painful and potentially dangerous infections depends in part on the stage of otitis media in which treatment is initiated and upon the age of the patient. These infections are most commonly due to a Streptococcus, Pneumococcus or Staphylococcus. In the age group under five years, Hemophilus influenzae is a frequent causative microorganism. Other gram-negative rods are rarely pathogens in acute otitis media although they are frequently cultured as contaminants from the ear canal. Viral otitis media certainly occurs, but it is difficult to distinguish from bacterial otitis media.

In view of the predominance of the Streptococcus, Pneumococcus, and Staphylococcus of the penicillin-sensitive non-hospital species, penicillin is the antibiotic of choice. In the group susceptible to H. influenzae, ampicillin is the drug of choice. In the presence of penicillin allergy, erythromycin is the agent of second choice and is combined with sulfisoxazole in children under five years of age.

The route of choice and the form of penicillin depends on the severity of the otitis as gauged by its local and systemic manifestations. Initial intramuscular procaine penicillin may be followed by oral penicillin G or V. Adequate dosage can be provided by either the oral or intramuscular route. Of great importance is the duration of the therapy which should be 12 days in all cases because of the possibility of a streptococcal infection and its relatively slow resolution. The patient should be evaluated again before the antibiotic therapy is complete for otoscopic evidence of resolution, reventilation of the middle ear and return of the hearing to normal.

In several cases, a myringotomy may be indicated. In any otitis media with a painful, bulging tympanic membrane, a myringotomy is performed to establish drainage in order to hasten resolution, relieve the pain, protect the hearing and prevent complications. The decision for

myringotomy depends only partially on the otoscopic picture. The systemic reaction to the otitis media should also be considered. High fever, vomiting and diarrhea argue in favor of a prompt myringotomy.

A patient with early otitis media in whom a myringotomy may not be indicated is evaluated again in a day or two if pain and fever persist.

Adjunct therapy with topical nasal vasoconstrictors enhance ventilation of the middle ear during resolution of the otitis. Phenylephedrine is the safest of the sympathomimetic amines for this purpose. Although systemic use of sympathomimetic amines is better tolerated by some children and adults, this route for these agents is less reliable. Antihistamines are indicated in individuals with an underlying allergic manifestation, but their general use in acute otitis media is not indicated.

Exacerbations of chronic otitis media may require systemic antibiotic therapy for control of the infection but usually topical antibiotic therapy suffices. Topical therapy depends on thorough cleaning of the ear canal and middle ear done so that the antibiotics can be applied to the mucous membrane of the middle ear. Topical corticosteroids are also efficacious as an adjunct to the antibiotics. If the discharge is profuse, systemic antibiotic therapy is often required. The causative microorganism in exacerbations of chronic otitis media are *Staphylococcus* and gram-negative bacilli such as *E. coli*, *P. aeruginosa* and *B. proteus*. Therefore, a broad spectrum antibiotic such as ampicillin or tetracycline is used for systemic therapy. A combination of neomycin and polymyxin are used for topical therapy.

The evaluation of the ear with a permanent perforation of the tympanic membrane for prolonged conservative management, tympanoplastic repair, or radical mastoidectomy depends on the type and location of the perforation, the hearing, the frequency of exacerbations, the radiographic appearance of the mastoid process, the presence of cholesteatoma and the presence of threatening symptoms of an intracranial complication such as earache, temporoparietal headache, vertigo, precipitous changes in hearing, and chills and fever. In general, central perforations are repaired by tympanoplasty after two to three months of freedom from otorrhea. Attic and

marginal perforations with evidence of cholesteatoma require a radical or modified radical mastoidectomy to make the ear safe.

The majority of infections that the patient calls "sinus" or "sinusitis" are not sinusitis but rhinitis. The usual viral upper respiratory infection is accompanied by a secondary bacterial infection which results in a non-foul smelling, yellow, purulent rhinorrhea. The edema of the nasal mucous membrane may result in complete nasal obstruction. Frontal headache and maxillary pain may occur simulating sinusitis. This secondary bacterial infection subsides in the vast majority of patients in seven to ten days without therapy, and its resolution is usually accelerated by antibiotic therapy. Davis and Wedgewood have critically reviewed the carefully controlled studies of prophylactic antibiotic therapy in viral upper respiratory infections. Antibiotics are not effective in preventing bacterial complications of the common cold.¹ The risk of superinfection is high with broad spectrum antibiotics and not insignificant with penicillin. If streptococcal infections are excluded by throat culture and patients with positive cultures are treated with twelve days of penicillin, the soundest course in otherwise healthy individuals is to withhold antibiotic therapy until a complication such as otitis media, sinusitis, laryngitis, bronchitis or pneumonia is definitely established. Excepted from this policy are children with congenital heart disease, pregnant women, allergic individuals and patients with chronic pulmonary diseases including chronic bronchitis.

Purulent rhinorrhea persisting beyond fourteen days and not decreasing daily in amount is an indication for antibiotic therapy.

Sinusitis that is confirmed by an opaque sinus on transillumination or by radiographic opacity of the sinus is a bacterial infection and merits vigorous antibiotic therapy. The initial selection of the antibiotic depends in part on the past history of the patient. Sinusitis developing in a previously well patient is most likely due to a *Streptococcus*, *Pneumococcus* or *Staphylococcus*, and the antibiotic of choice is penicillin. Exacerbations of chronic sinusitis are likely to require broader spectrum antibiotic therapy. Ampicillin or tetracycline is usually chosen because of the likelihood of a significant gram-negative rod infection. Antibiotic therapy in

acute sinusitis is continued for at least twelve days, and evidence of resolution by improved transillumination or radiographic clearing of the sinus is sought before the treatment is discontinued. The initial cultures and sensitivities guide therapy as soon as they are available; however, the response of the patient to the treatment is often the best guide. Chronic sinusitis often requires four to six weeks of antibiotic therapy for resolution.

A spray of a vasoconstrictor such as phenylephedrine is particularly efficacious in promoting sinus drainage. Vasoconstriction of the mucous membrane on the nasal side of the sinus ostium effectively reduces the obstruction to the ostium. Steam inhalations also effectively reduce the swelling of the nasal mucous membrane. Systemic sympathomimetic amines are less reliable, but they are often better tolerated. Antihistamines should be employed only when there is an underlying allergic rhinitis. Analgesia in the form of aspirin and codeine is appropriate.

Early surgical manipulation in acute maxillary and ethmoid sinusitis is contraindicated and may be followed by aggravation of the sinusitis and serious complications. Persistent severe pain and tenderness of the frontal sinus in spite of vigorous antibiotic therapy requires trephining of the front wall of the sinus to reduce the risk of serious intracranial complications.

Acute ethmoiditis may present as its complication, orbital cellulitis. Eighty percent of orbital cellulitis in children is due to acute ethmoiditis. Vigorous antibiotic therapy ordinarily allows rapid resolution. Persistent proptosis indicates abscess formation which may require incision and drainage. Proptosis limits the range of the extraocular motion. Proptosis of sufficient degree to cause fixation of the globe requires immediate incision and drainage of the abscess to preserve the vision. The abscess lies between the lamina papyracea and the orbital periosteum. The Killian incision in the brow is required, and the orbital periosteum is elevated from the medial wall of the orbit to reach the pus.

Tonsillitis is usually a streptococcal infection. Viral tonsillitis is relatively rare except in epidemic form in special locations such as military reception stations. Penicillin is the antibiotic of choice for tonsillitis and is instituted as soon as the culture is taken. It should be continued

for twelve days. If a Streptococcus is cultured, the throat is recultured four to five days after the course of penicillin is completed. Persistence of the Streptococcus requires retreatment.

Pharyngitis, on the other hand, is usually viral, and antibiotic therapy is withheld until a positive streptococcal culture is obtained. Depending on the course of disease, treatment for pneumococcal and coagulase positive staphylococcal cultures should be made on an individual basis. Peritonsillar cellulitis is a streptococcal infection in the vast majority of cases and responds well to penicillin. If abscess formation occurs, incision and drainage gives immediate relief, but it is ordinarily successful only shortly before necessitation. It is well to see definite evidence of pus beneath the mucous membrane such as a slight yellow tinge to the mucous membrane prior to incision.

Laryngitis in the adult may be viral or bacterial. Antibiotic therapy is rarely dramatically effective and should usually be instituted only after a positive streptococcal, pneumococcal or staphylococcal throat culture is obtained. Strict voice rest, steam inhalations, antitussive agents such as benadryl, and expectorants such as a saturated solution of potassium iodide are indicated.

Epiglottitis and laryngotracheobronchitis in the infant and young child are emergencies of the first order. The airway obstruction is often quickly relieved by placing the child in a humidified atmosphere. They are usually viral illnesses but are occasionally due to Streptococcus, Staphylococcus or H. influenzae. In view of the possibility of H. influenzae as a causative agent, ampicillin is the antibiotic of choice. Corticosteroid therapy is also initiated early in the course of the illness. Antihistamine therapy is probably contraindicated in view of the fact that it increases the viscosity of the tracheobronchial secretions. The prevention of a tracheotomy depends primarily on prompt institution of humidification therapy. The decision for a tracheotomy is based on the adequacy of the ventilation, the ability to sustain the necessary respiratory effort and the pulse rate. Cyanosis is a late and ominous sign, and the decision for a tracheotomy should be made prior to its advent.

In summary, otitis media, sinusitis, tonsillitis,

epiglottitis and laryngotracheobronchitis should be treated with antibiotics as soon as the culture is taken. Rhinitis, pharyngitis and laryngitis in adults may be managed expectantly until a significant culture is obtained. Antibiotic therapy for persistence of rhinitis, pharyngitis and laryngitis after the seven to ten day period usually required for viral infections is indicated on an individual basis. In general, antibiotic therapy for upper respiratory infections should be continued until objective evidence of resolution has occurred and for twelve days in the case of streptococcal infections. Throat cultures should be repeated in four to five days after completion of treatment for a streptococcus. Myringotomy in acute otitis media, trephining in unresponsive

acute frontal sinusitis and tracheotomy in laryngotracheobronchitis are still important surgical measures; the timing of which is very important. Other surgical manipulations are usually meddlesome in the acute phase of these infections.

Prophylactic antibiotic therapy has not been shown to prevent bacterial complications of viral respiratory infections. In general, antibiotics are not effective in altering the course of viral respiratory infections and have no place in their primary treatment.

REFERENCE

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Postdoctoral Medical Education in Arkansas:

I. Facts and Trends

William G. Reese, M.D.*

One third of the full-time student body of the University of Arkansas School of Medicine are M.D.'s who are engaged in advanced medical education in the interest of their present and future patients. These interns and residents may not know that they are part of the student body. Intramurally, the responsibility for their advanced education is shared by them, by their program directors (with dual appointments in the School of Medicine and in University Hospital) and by the hospital director. The School of Medicine *per se* has been a relatively silent partner in the educational enterprise, even though the School provides virtually all of their faculty instructors. Now the School of Medicine is becoming a more visible partner in the advanced educational enterprise and is identifying the "upper third" as its postdoctoral medical students.

This move is consistent with the following statement on "Functions & Structure of a Medical School"¹ approved in 1972 by the Association of American Medical Colleges (AAMC) and in 1973 by the AMA House of Delegates: "Each school is responsible for development of graduate education to produce practitioners, teachers, and investigators, both through clinical residency programs and advanced degree programs in the basic medical sciences." It should be noted that our postdoctoral students are candidates for *certificates* rather than *degrees*, although they do have the option of qualifying for an additional advanced degree in one of the biomedical sciences. M.S. and Ph.D. degrees are offered by the Graduate School of the University of Arkansas although the biomedical science faculty are primarily faculty members of the School of Medicine.

The historical identification of house officers with the teaching hospital is typified by my cer-

tificate of residency which states, over the signatures of the chief of service, the director of the hospital and the president of the board of trustees, that "Dr. William G. Reese has served on the Resident Staff of The Johns Hopkins Hospital on the Psychiatric Service from May 1st 1946 to September 1st 1948." No modifier, such as "satisfactorily," appears! (And only my chief's signature remains visible, since only he signed in permanent ink.) In contrast, my certificate from the American Board of Psychiatry and Neurology boldly states that I am qualified to practice psychiatry. For some years at UAMC the residency certificate has been a joint offering of the School of Medicine and University Hospital and carries the Dean's signature and the signature of other appropriate officials, but none above the level of vice-president. Perhaps in deference to the specialty boards, we do not yet certify that the recipient who has satisfactorily completed a full residency program is qualified to practice in the area of his specialty.

In December 1973, with higher institutional approval, Dean Winston K. Shorey designated the author as Associate Dean for Postdoctoral Medical Education (excluding continuing education). The part-time short-term appointment was intended as a prelude to later appointment of a permanent and possibly full-time incumbent. In part, the Dean's charge was "to include:

1. Review of our programs in postdoctoral medical education from the viewpoint that these have become a continuum in medical education rather than only a hospital-based practical experience in clinical medicine.
2. Consideration of both the philosophical and practical issues involved in the evolution of our postdoctoral medical education programs into a corporate undertaking of the School of Medicine rather than their operation as separate entities independent of each other.
3. Study and recommendations relative to the

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appropriate allocation of costs of postdoctoral medical education."

In brief, the initial thrust was to entail study, survey and counsel rather than administrative function. This, and probably subsequent papers, will report these studies and coincident recommendations, which are not to be interpreted as official opinion or policy.

The Dean stated that "the implementation of the responsibilities will necessitate collaborative activity with hospital administration." The aim was to expand the educational dimension of the school-hospital relationship rather than to diminish the contributions of any of the educational partners. It should be made clear that the UAMC hospital director, like most of his counterparts elsewhere, is and has been quite supportive of the primary educational mission of the total academic health center.

Current trends in housestaff education in Arkansas (and elsewhere) may be summarized as follows:

1. Educational professionalization (as discussed above).
2. Longitudinal integration of educational experience through the predoctoral, postdoctoral and continuing phases.
3. Development of decentralized but coordinated educational foci in Area Health Education Centers (AHEC's) and community hospitals.
4. Response to the need and demand for equitable distribution of physician manpower by specialty and by location.

Together, these trends portend a quiet revolution (or at least an accelerated evolution). I shall not pretend that medical educators or other physicians have necessarily generated, or even endorsed, all of these trends; nor were they necessarily in the vanguard of the undeniable revolution typified by Abraham Flexner's report in 1910.² Neither will I subscribe to the naive notion that change and improvement are synonymous.

Before dealing with these trends, let us inventory quantitatively our present programs and advanced students and our external relationships. For now, we shall not speak to the more

important quality issues, beyond saying that we have high quality programs and participants. Financing issues will be left to a subsequent report.

Extramural Partners In Housestaff Education

At the beginning we spoke of intramural partnerships and later referred to budding AHEC affiliations with community hospitals and clinics. What about our current extramural partners? How can we accommodate our large student body in University Hospital and Clinics? Obviously we cannot and do not. At both pre- and postdoctoral levels, we rely heavily on affiliated institutions and our extra-mural faculty in those institutions. A rough index of the degree of sharing and of distribution of housestaff between educational sites is provided in Table 1, which shows in approximate percentages the source of housestaff stipends (first column, non-federal; second, federal).

TABLE 1
SOURCE OF HOUSESTAFF STIPENDS
BY PERCENT

University Hospital	46	
Arkansas Children's Hospital	7	
Arkansas State Hospital	1	
Little Rock Community Hospitals	6	
Other local sources	4	
Veterans Administration Hospital		27
Other federal sources		9
	64	36

We estimate that the other and larger educational costs, particularly faculty salaries, are distributed somewhat proportionately to stipends.

Inventory of UAMC Internships and Residencies

As detailed in Table 2, the advanced student body for 1973-74 consisted of 223 members enrolled in 17 specialty programs.* These figures do not include a small number of affiliate residents from separate programs, such as the psychiatry residency of the Arkansas State Hospital.³ The figures do include 12 predoctoral Family Practice residents who were simultaneously completing their elective senior year. For our purposes, we shall include them with the true postdoctoral group.

*In addition to small programs in Pediatric Allergy and Thoracic Surgery.

TABLE 2
UAMC INTERN AND RESIDENT POSITIONS: 1973-74

	*	Year of Post-M.D. Education							**	***
	-1	1	2	3	4	5	6	Sum	%	%
ANESTHESIOLOGY	0	2	1	2	0	0	0	5	4.3	3.4
DERMATOLOGY	0	0	3	2	2	0	0	7	2.9	1.9
FAMILY MEDICINE	12	3	5	1	0	0	0	21	21.3	23.9
INTERNAL MEDICINE	0	10	9	10	9	4	1	43	14.3	16.0
NEUROLOGY	0	0	2	2	2	0	0	6	2.9	0.5
NEUROSURGERY	0	0	1	1	1	1	0	4	1.4	1.4
NUCLEAR MEDICINE	0	0	0	0	0	1	0	1	1.4	0
OBSTETRICS-GYN	0	4	4	4	0	0	0	12	5.7	6.2
OPHTHALMOLOGY	0	1	3	3	3	2	0	12	4.3	4.3
ORTHOPEDIC	0	0	4	4	4	0	0	12	5.7	3.8
OTOLARYNGOLOGY	0	0	2	3	3	1	0	9	4.3	2.1
PATHOLOGY	0	0	1	5	6	0	0	12	2.9	5.3
PEDIATRICS	0	7	5	4	1	0	0	17	8.6	7.2
PSYCHIATRY	0	3	3	2	0	0	0	8	4.3	5.1
RADIOLOGY	0	0	5	3	6	0	0	14	7.1	7.2
SURGERY	0	4	4	5	4	3	1	21	5.7	8.8
UROLOGY	0	2	2	2	2	0	0	8	2.9	1.2
ROTATING INTERNSHIP	0	11	0	0	0	0	0	11		
TOTAL	12	47	54	53	43	12	2	223	100	98.3

Note: These figures include Fellows earning residency credit in Internal Medicine, Pediatric Allergy and Thoracic Surgery.

- * -1 Predoctoral Housestaff
- ** Percentage distribution of matriculates
- *** Percentage distribution by specialty of 580 former graduates (8)

The median house officer in these programs had completed almost exactly two years of post-doctoral education. (Note the symmetrical distribution on each side of this midpoint.) By extrapolation, it is evident that the average duration of postdoctoral education is approximately equal to that for predoctoral medical schooling. The number of slots for interns and residents

must be increased in order to have sufficient in-state positions to accommodate all of our graduates or their imported alternates. In July 1974, the number of new slots for beginning Family Practice residents will *double* while all other UAMC programs remain at the 1973 level. *Properly funded and developed*, the AHEC's will provide for a significant increase in educational

capacity for primary physicians, as well as for predoctoral students and physician extenders.

Longitudinally Integrated Medical Education

In June 1970,⁴ the AMA House of Delegates adopted the following recommendation of the Council on Medical Education: "After July 1, 1975, no internship program shall be approved which is not integrated with residency training to form a unified program of graduate education." In short, the internship will no longer be free-standing. This change was stimulated in part by the recommendations of the Citizens Commission on Graduate Medical Education, the so-called Millis Report.⁵

The new variability in predoctoral curriculae in medical schools forces an adaptive variability in postdoctoral programs. In Michael's words:⁴ "The cookie cutter has been discarded and graduating students will arrive for a period of 'post MD' education with diverse backgrounds of information and experience." Schoolman⁶ puts it this way: "It is necessary to find a new approach that will support the concept of tailoring medical education to the individual's needs and potentialities and make medical education a continuum in fact rather than in theory."

Pedagogical wisdom dictates that Schoolman and others are correct in the view that the duration of each phase of formal medical education should be made variable and that satisfactory completion of each phase, should be determined by valid and reliable measures. To do so requires more than a change of custom; it requires the establishment of criteria and reliable measures of clinical ability in general and in each specialty in particular. The busy academic clinician has had little time and often limited interest in such pedagogical specification and measurement; but at least some are seriously trying. In the specialties the duration of education has remained the constant and the ultimate determination of ability has been left largely to the specialty boards. To my knowledge, the American Board of Orthopedic Surgery has made the most serious attempt by specialty boards to specify and measure professional competence. That Board even schools its examiners in techniques of examination.

Corporate Responsibility

According to Schoolman,⁶ the Advisory Committee on Graduate Medical Education of the

AMA Council on Medical Education has recommended "that faculties of institutions assume corporate responsibility for the conduct of graduate education within their institutions" and that the "corporate responsibility should include determination of allocation of resources to strengthen weaknesses and achieve institutional balance, as well as exploit the strengths." His brief paper discusses the rationale of the recommendation. He goes on to recommend personally the institutional accreditation of graduate education. These are old models for predoctoral medical education; e.g. the Dean and his faculty have unified shared responsibility for the medical school curriculum and for selection and advancement of medical students. Courses offered by each department are subject to review by others, usually through the representative Curriculum Committee. *Vis à vis* accreditation, the total medical school is accredited (or not) through a single mechanism — the Liaison Committee on Medical Education representing the AMA and the Association of American Medical Colleges.

These issues are complex and far-reaching; their resolution may have weighty impact on the future of postdoctoral medical education and on the structure of a number of institutions in addition to medical schools. For example, some are predicting the waning or even the demise of the American specialty boards. My crystal ball is considerably fogged.

Distribution of Physicians

Without considering the extent to which we should and could influence the distribution of physicians, we shall look at some aspects of the current distribution by specialty. In this paper little will be said about geographical distribution. In our 1972 paper,³ Shannon and I reported on the source and distribution of Arkansas psychiatrists. What about the other specialties? Our 1973 postdoctoral "pipeline" accepted 81 new interns or residents. Excluding the 11 rotating interns, whose specialty choice is not known to us, the remaining 70 have selected specialties for advanced education. Their choices are shown in percentage terms in the next-to-last column of Table 2. At this reporting we expect the Family Practice percentage to increase from 23% to 42% in 1974. Since the number of "matriculates" in each other program will

remain constant, their percentages will decrease proportionately. The percentages in the last column require more explanation.

In his 1972 paper in the Journal,⁷ Dean Shorey addressed pragmatic and philosophical issues, including manpower aspects. In a series of annual reports^{8,9} to the House of Delegates of the Arkansas Medical Society, he provided rather extensive and detailed information about the distribution of our graduates. He demonstrated the *relative* effectiveness of UAMC in producing physicians who practice in Arkansas, who practice primary medicine in Arkansas, and who practice in rural settings. Although considerably short of the theoretical ideal, when compared with other states the record is excellent and the trends are in the right direction. Most of his statistics refer to those completing predoctoral education in our school. Refer also to the detailed report by Associate Dean Marvin.¹⁰

Shorey's 1972 study⁹ included distribution by specialty of 838 physicians who graduated from University of Arkansas School of Medicine between 1961-71. Of these (mainly those not in military service) 580 had entered the practice of an identifiable specialty or were in full-time specialty education programs. Selecting some of the figures: 24% were identified with general or family practice; 7% with pediatrics; 5% with psychiatry; 16% with general or specialty surgery; and less than half percent with public health. These and the percentages for the other specialties are listed in the last column of Table 2. The 1.7% not accounted for in the total included five physicians in Bioengineering, Emergency Medicine, Plastic Surgery and Public Health.

The reader is requested to reach his own conclusions about the degree of congruence between our present educational priorities and manpower needs. I am quite confident that our production capacity in psychiatry must be at least doubled if we are to reach the national mean within a decade. I do not contend that we need additional psychiatrists at the expense of any other particular field (with possible exceptions). In Arkansas we probably need more of almost all types. To accomplish this an increase in *post-doctoral* capacity would produce more rapid dividends and probably more economically than an increase in predoctoral production.

The AHEC's, if adequately staffed and funded, offer considerable opportunity for expanded pre- and postdoctoral programs (especially for Family Practice), for continuing education, for nursing and for other health careers. The physicians of Arkansas, who participated considerably in this exciting new development, are quite aware of the combined internal leadership by Vice-President James L. Dennis and Dean Shorey, and of the external leadership of Governor Bumpers, the 1973 General Assembly and the Arkansas Medical Society.

The not-so-subtle voice of the Federal Government is audible with respect to manpower issues. Section 227 of Public Law 92-602¹¹ provides for a study by the National Academy of Sciences which, in part "will investigate the extent to which Medicare and Medicaid reimbursement:

- a) support training in medical specialties which are in excess supply;
- b) could be expended in a way to support a more rational distribution of physician manpower (geographically and by specialty);
- c) support training programs that disproportionately attract foreign medical graduates; and
- d) provide salary support to intern and residency programs.

The law provides that an interim report should be prepared by December 1, 1974, and a final report completed no later than July 1, 1975. The report will be submitted to the Committee on Finance of the Senate and the Committee on Ways and Means of the House." We can reasonably predict that this report will do more than gather dust. If the policies for medical education of the present administration prevail, the federal hand will be on the horn and the federal foot will be on the brake more than on the accelerator.

Summary

This report to Arkansas physicians:

- A. Inventories the 1973-74 housestaff of UAMC and affiliates according to:
 1. distribution between 18 internships and residencies;
 2. distribution by year-level of advanced education; and in part
 3. distribution between UAMC home-base and affiliating institutions.

B. Suggests a minor revolution in medical education composed of the following current changes, trends and possibilities:

1. primary identification of interns and residents as advanced postdoctoral students of the School of Medicine who constitute, in Arkansas, one-third of the total medical student body;
2. longitudinal integration of medical education at least through the pre- and post-MD phases of full-time formal learning;
3. development of decentralized but centrally coordinated educational foci for these two phases *and* the continuing education phase; and
4. increased acceptance by medical educators of shared responsibility in contributing to a more rational distribution of physicians both geographically and by specialty.

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Intraoperative Tension Pneumothorax*

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INTRODUCTION:

Positive pressure ventilation may rupture the lung. This complication can occur with either manual or mechanical respiration, and insufflation pressure does not have to be excessive. A number of cases have been described recently with the use of positive end-expiratory pressure. During surgery, diagnosis is more difficult since the usual symptoms of suddenly developing pneumothorax, such as pain and dyspnea, are absent. Nevertheless collapse of the lungs must be treated immediately or the patient will succumb from hypoxia. In this report three cases of intraoperative pneumothorax will be described along with the circumstances responsible for their evolution. As this phenomenon seems to be occurring more commonly at surgery, a wider appreciation of this potentially disastrous complication is indicated.

CASE MATERIAL:

Case #1:

A 36-year-old white male with a 12-year history of polycystic kidney disease, progressive azotemia and hypertension underwent renal transplantation. Halothane, nitrous oxide and oxygen were administered via an endotracheal tube. Ventilation was assisted manually except for a brief, unsatisfactory attempt at mechanical ventilatory assistance. The patient did not manifest respiratory or circulatory difficulty during the operation. Later, when he was awake in the recovery room he complained of left chest pain and shortness of breath. A chest x-ray (Figure 1) showed complete collapse of the left lung. At that time the anesthetist associated the pneumothorax with the earlier difficulties in mechanical insufflation. A chest tube was inserted and water seal drainage begun. The lung fully inflated. After 48 hours the tube was withdrawn and recovery was uneventful.

Case #2:

A 48-year-old white man underwent celiotomy for chronic peptic ulceration. Halothane, nitrous oxide and oxygen were administered via an

endotracheal tube. The procedure was undertaken through an upper abdominal midline incision and was progressing, when halfway through a Kocher maneuver, mechanical ventilatory assistance was attempted. A loud wheeze was heard at this point, and lung volume expanded considerably, as evidenced by the viscera protruding from the wound, and the liver moving from the upper to the lower end of the incision. Simultaneously the patient's blood pressure dropped from 150/80 mm Hg to 45/0 mm Hg. His face reddened and the neck veins distended. The cardiac monitor showed an elevated takeoff of the ST segment to approximately one-half the height of the QRS complex.

The ventilator was immediately disconnected and manual ventilation was resumed. The surgical procedure was discontinued and resuscitation begun. The immediate impression was that the patient was undergoing intense bronchospasm. He responded to ventilation with oxygen, increased fluid infusion, and intravenous mephenteramine, with a rise in his systolic blood pressure to 96 mm Hg. The consultant anesthesiologist suspected a pneumothorax, and 15 gauge spinal needles were inserted into each chest, but no rushes of air were appreciated. The patient's condition improved momentarily and the operative procedure resumed. However, his condition soon deteriorated. A pneumothorax



Figure 1.

This is the anterior posterior chest roentgenogram of Case #1 taken in the post-anesthetic recovery room. Note complete pneumothorax on the left without shift of the mediastinum.

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was still suspected, and a heart attack was considered. A chest x-ray was immediately made with the patient still on the operating table. This showed bilateral pneumothoraces. (Figure 2) Interestingly, at this point he had distant and bilaterally equal breath sounds. Chest tubes were quickly inserted through both anterior second interspaces and placed to water seal drainage and suction. This produced rushes of air from the chest. The florid facies, distended neck veins and hypotension quickly returned to normal. In about 5 minutes, the take off of the ST segment also returned to base line. His postoperative course was unremarkable except for traumatic lung cysts. (Figure 3) Three were located in the left lower lobe, one large one in the right lower lobe. These were asymptomatic and the large right lower lobe cyst was unaffected by an attempt to resolve it with a separate chest tube. These resolved on successive chest x-rays over a period of three months.

A review of the situation revealed that an erroneous connection from the ventilator to the gas machine was the cause of the disaster. This allowed for inflow of gas to the patient but impeded outflow. The anesthetist who had previously used the machine had "parked" some clean tubing in the wrong place. The second and less experienced anesthetist failed to notice this when preparing the circuit.

Case #3:

This 47-year-old white male was hospitalized for rheumatic valvular heart disease. Cardio-angiography revealed a filling defect in the left atrium consistent with an atrial myxoma. Surgical excision was undertaken through a median sternotomy and neither pleural space was entered. Droperidol and fentanyl (Innovar®) were administered intravenously while nitrous oxide-oxygen was given via an endotracheal tube. No problems were noted in maintaining manually assisted ventilation. Airway pressure, measured with a manometer on the gas machine, never exceeded 35 cm H₂O pressure. After successful removal of the myxoma, right atrial filling and cardiac function were inadequate and ventilatory flow of air was severely retarded. Manual compression of the rebreathing bag gave the sensation of extreme resistance similar to that encountered in intense bronchial spasm or severe restrictive lung disease. The right mediastinal pleura moved slightly with each compression of the rebreathing bag. The pleura was intact but bulging into the mediastinum. The pleural space was opened and a compressed right lung was seen. Following the release of trapped pleural air the right lung easily expanded with positive pressure ventilation. There was an immediate improvement in heart activity. Small blebs were noted on the right upper lobe after re-expansion.

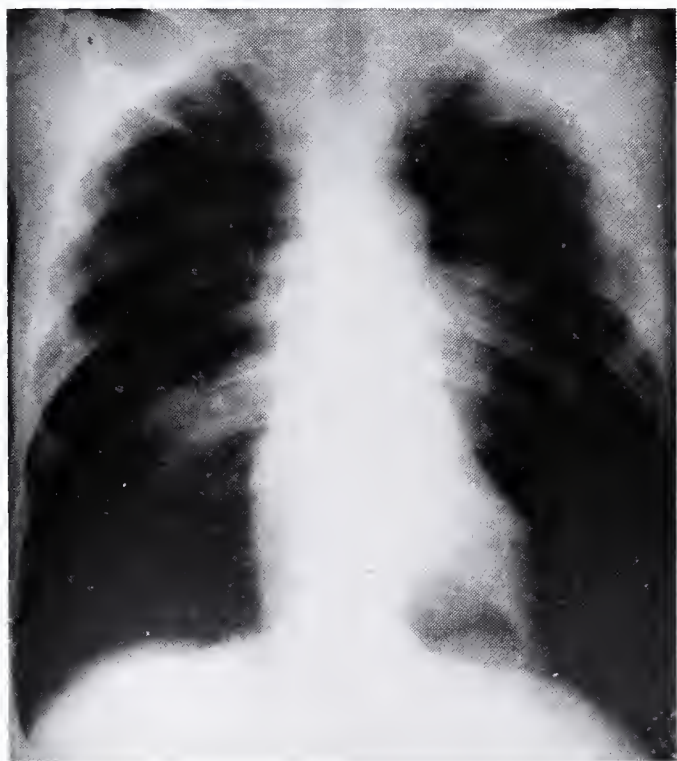


Figure 2.

A.P. roentgenogram of the chest taken in the operating room on the second patient. Extensive bilateral pneumothoraces are confirmed.

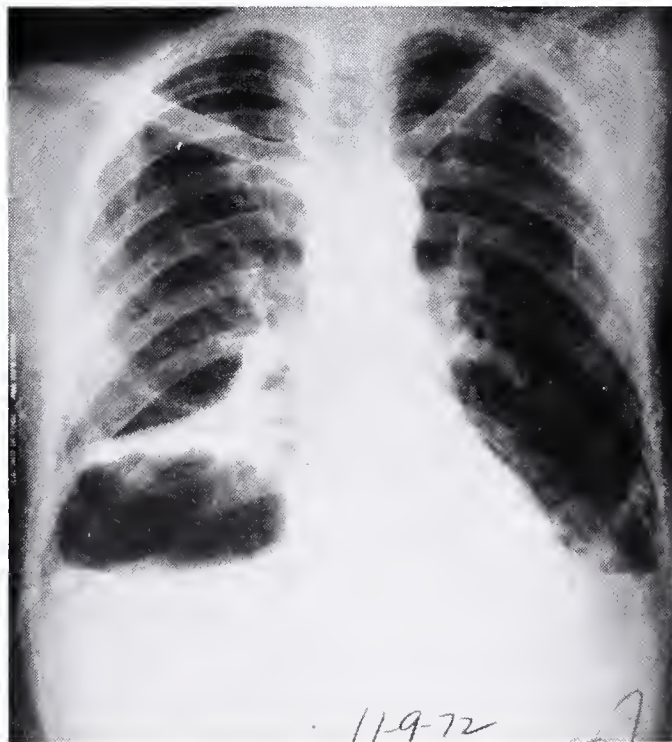


Figure 3.

P.A. chest film taken ten days post-operatively in the second case demonstrating re-expansion of both lungs with basilar cysts, more marked on the right.

A chest tube, connected to water seal drainage, was placed and was removed in two days. Post-operative recovery was uneventful.

DISCUSSION:

The commonest cause of pneumothorax is spontaneous rupture of a bleb. Less frequently air¹ may enter the pleural space following penetrating or blunt injury to the lung. This is almost always unilateral, though rarely both sides are involved. The probability of a spontaneous pneumothorax occurring coincidental to operation is obviously remote. The incidence of pneumothorax, however, is known to be increased during artificial ventilation of the lungs. This is especially true with high pressure mechanical ventilation. Pneumothorax is an occasional complication of long term ventilatory support, particularly when positive End expiratory pressure is employed. Large tidal volumes, high inspiratory pressures and a history of obstructive lung disease are established contributing factors. Our experience with pneumothorax occurring during operation is in agreement with these findings since two of our cases occurred during mechanical ventilation and the other had obstructive lung disease.

It is important to be aware of the possibility of pneumothorax occurring during anesthesia because, if the condition is not immediately recognized, treatment may be too late. The usual sequence of events in the "complete" syndrome is that the patient coughs, his chest distends, he wheezes, resistance to ventilation increases markedly, the neck veins distend, and the face becomes florid. As the pneumotamponade progresses, cardiac return and output diminish and the blood pressure drops. We had experience with all forms of pneumothorax — unilateral, bilateral and tension. Symptoms may be much less obvious, as in one of our cases, if the pneumothorax is limited to one hemi-thorax. Christian² reported an episode regarding a burned patient who, under endotracheal anesthesia, developed airway resistance, wheezing and severe hypotension. Early recognition and resolution of the problem was hampered by inability to inspect the patient as his neck, face and chest were obscured by bulky burn dressings. Cardiovascular collapse was initially attributed to bronchospasm. As Hamilton and Moyer³ have reported "all that wheezes is not bronchospasm".

Our third case differs from the first two in that excessive airway pressure was not delivered with a mechanical ventilator and the patient's lungs were not subjected to a pressure greater than 35 cm H₂O observed on a manometer. Although to our knowledge he had no pre-existing disease, we did find small apical blebs upon entering the pleural space. MacKenzie⁴ stated the pressure required to rupture the lung in an intact chest, or supported lung, ranges from 80 to 140 cm of water pressure whereas in the open chest or with an unsupported lung, the threshold was less, ranging from 40 to 60 cm water. Perhaps thoracotomy even with an intact pleura, in our third case, produced an unsupported lung and 35 cm water pressure was excessive because of lung disease (emphysema). This experience is chastening since 40-50 cm water pressure is used frequently and without complication in expanding an atelectatic lung at the completion of thoracotomy.

Most mechanical ventilators have safety valves which open at 50 cm water pressure. This level can be exceeded when valves are malfunctioning (tight), gas flows are excessive, or the valve is bypassed by inadvertent reversing of the air flow circuit. We believe one or other of these factors contributed to our two cases of pneumothorax on mechanical ventilation. With manual ventilation, safe pressures can be exceeded if the re-breathing bag is purposely over-distended by closing the expiration valves for more vigorous insufflation.

In the pathophysiology of lung rupture secondary to high pressure in the air passages, the flow of air may take one of two pathways. One is peribronchial rupture with retrograde air leak⁵ along the bronchus producing pneumomediastinum pneumothorax and eventually subcutaneous emphysema in the supra and subclavicular spaces. The second pathway is for the air rupture to occur distal to the bronchioles, in the pulmonary alveoli. This problem has been studied at autopsy in dogs and in patients who died of over-expansion pneumothorax. The lung parenchyma in these specimens appeared to be "air splinted" and showed evidence of obstruction to lymphatics, veins and even arterioles. These specimens presented a microscopic picture of "shock lung". Damage and bleeding into the lung produces hematoma. These are ex-

pectorated leaving cavities. Such posttraumatic lung cysts which developed in one of our cases have been previously described by Fagan.⁶ They resolve slowly. Gold and Joseph⁷ reported two cases with bilateral intraoperative tension pneumothorax of which one died. Both of these patients had preexisting chronic obstructive pulmonary disease. The patient who died, at necropsy, showed intracardiac, intravenous, and subcutaneous air. Air bubbles were found in the left circumflex coronary artery. Lenaghan⁸ and others have reported similar findings.

It cannot be over-stressed that early recognition of intraoperative pneumothorax is the key to successful treatment. The diagnosis can be made by placement of large bore needles in the second interspace anteriorly on the involved side(s). A chest x-ray will give further confirmation. Chest tubes are then appropriately placed to allow lung re-expansion. Review of the literature indicates, as our patients have demonstrated, that if these patients are resuscitated early, supported adequately, and followed closely, their course is usually one of rapid progressive recovery.

SUMMARY:

Three cases of intraoperative pneumothorax have been presented. Two occurred during abdominal surgery and were related to excessive airway pressure from misapplication of a mechanical ventilator. The third instance happened with open heart surgery through a median sternotomy incision. This patient had manual ventilation and excessive airway pressures were

not delivered; however, emphysematous blebs were found after the unilateral tension pneumothorax was relieved by incision of the bulging right pleural space. The development and evolution of traumatic lung cysts secondary to over expansion rupture of both lungs have been traced in one case. The possibility of pneumothorax should be considered in patients who suddenly develop shock during operation. This complication can cause chest pain and dyspnea in the postanesthetic recovery room. Early diagnosis and prompt treatment produce a favorable outcome.

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1973 Mediterranean Adventure

In 1972, the Society began a travel program in cooperation with the International Travel Advisers of Saint Louis. As members of the Medical Society, physicians and their families may take advantage of group prices at hotels and restaurants while participating in trips expertly arranged. The total cost of the tour package is usually about the same price as commercial air fare alone. The first travel adventure was in 1972 to the Orient. In 1973, a large number of members of the Society participated in the Mediterranean Adventure.

The accompanying pictures are from the Mediterranean Adventure. Members departed from Little Rock in a World Airways chartered DC-8. The group went by airplane to Nice, France, where they joined the Paquet cruise liner MERMOZ. Ports of Call were Sicily, Malta, Crete, Rhodes, Izmir, Turkey, Mykonos and Athens. The group returned to the States by air from Athens. The MERMOZ was really the

group's floating resort hotel for two weeks. Members enjoyed cabaret shows and a costume ball (see photos), French cuisine, beautiful weather and the perfect atmosphere for relaxation. INTRAV provided excellent guide-lecturers who gave daily talks on the historical background on each port. INTRAV representatives were available to help with arranging local sightseeing, etc.

The Society-sponsored INTRAV program is highly recommended to you. You will not find a better organization to travel with than INTRAV—they are experts in their field.

Another group of Society members will depart from Little Rock on July 30th for a two-week Scandinavian Adventure. If you haven't already made your reservation, you are taking a chance on being left behind. For information on the Scandinavian Adventure, write to the Society office at Post Office Box 1208, Fort Smith, Arkansas 72901.



The World Airways DC-8 which took the group to Nice, France.



Dr. and Mrs. C. C. Long of Ozark at one of the formal parties aboard ship.



Dr. J. B. Elders of Walnut Ridge enjoying dinner and champagne on the flight from Little Rock to Nice.

The Mediterranean Adventure

Below: Members enjoyed relaxing and viewing cabaret shows in the Grand Salon. From left: Dr. and Mrs. Ben Saltzman of Mountain Home, Dr. and Mrs. George Fotioo, Hot Springs, Dr. and Mrs. Kenneth R. Duzau of El Dorado, Mrs. Edna Boatright and Mrs. W. S. Riley, El Dorado.



Mrs. Stanley Applegate of Springdale walking through the streets of St. Paul, an old French village.



Dr. and Mrs. Kemal Kutait, Mr. and Mrs. Paul Bercher, and Mr. and Mrs. Paul Schaefer, all of Fort Smith, participated in the Costume Ball. "Anna and the King of Siam" were among the winners of the costume ball.



Another participant in the Costume Ball was Leah Richmond of the Headquarters staff.



Above: Dr. and Mrs. Kemal Kutait of Fort Smith and Dr. and Mrs. Haynes Jackson of Hot Springs taking the tender from the MERMOZ to shore at one of the ports. (Right) Dr. and Mrs. W. E. Phipps and Dr. and Mrs. E. J. Ritchie of North Little Rock relaxing in the Grand Salon of the MERMOZ.

Office Orthopaedics



Onychocryptosis (Painful Ingrown Toenail)

I. Leighton Millard, M.D.*

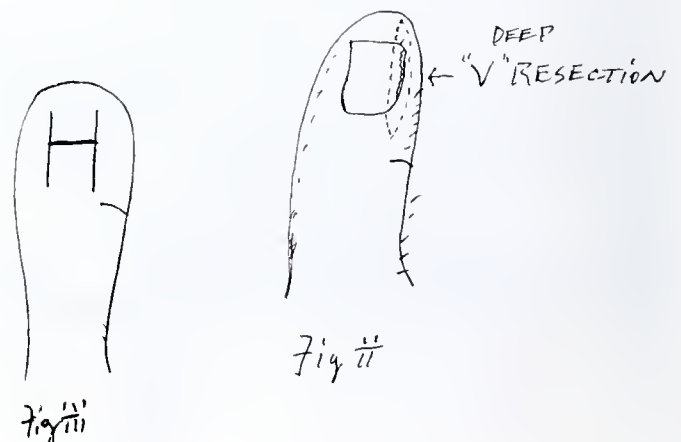
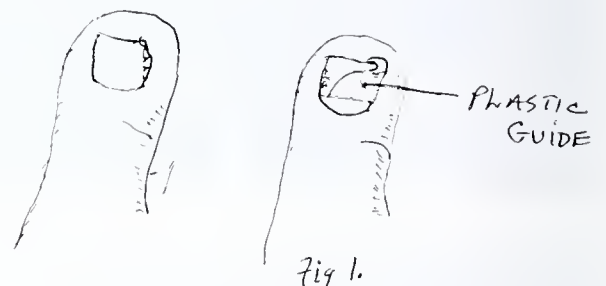
This very common and troublesome problem is best treated by prevention. That is, trimming the great toenail square and longer than the toe.

Once established, the abnormal growth pattern that allows the nail to "dig" into the toe can only be corrected by elevating the nail mechanically and guiding its growth until the nail tip is past the end of the toe. (A plastic guide is available in kit form.) (Fig. 1)

Too often, infection complicates the ingrown toenail and makes treatment more difficult. Once the paronychia granulation tissue forms it *must* be removed surgically (usually under local or digital nerve block anesthesia). This is best accomplished by removing a deep wedge of tissue that includes nail, nail bed, and the infected tissue and packing the defect with iodoform until it heals by secondary intention. (Fig. 2) If the nail can then be guided over and past the end of the toe, all will be well. If the "ingrowing" recurs the entire nail must be resected and a small portion of the underlying distal phalanx removed to allow suturing of the skin. (Fig. 3) This procedure is best done, usually bilaterally, in the operating room under general anesthesia. Following either of these surgeries,

broad spectrum antibiotics are indicated to control infection, but ambulation is encouraged as early as symptoms permit.

This discourse undoubtedly sounds like a great deal of surgery for treatment of a minor disease, but anyone whose feet have hurt from this problem will quickly assure you that onychocryptosis is *not* a minor condition.



* P. O. Box 5270, Little Rock, Arkansas 72205.

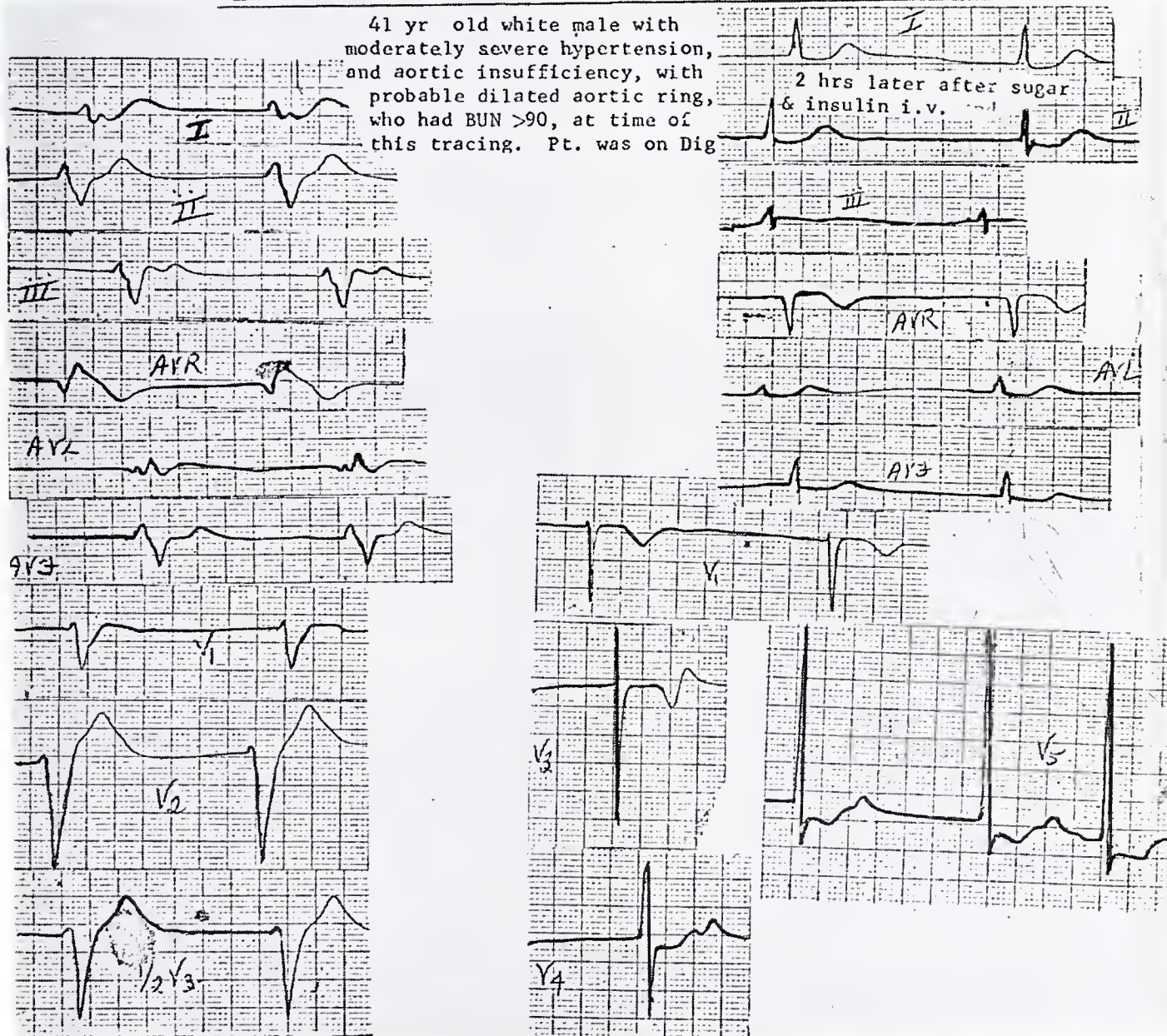
ELECTROCARDIOGRAM



OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

(See Answer on Page 413)



John E. Douglas, M.D., Assistant Professor of Medicine
University of Arkansas Medical Center
4301 West Markham
Little Rock, Arkansas 72205

JACKSONVILLE CONVALESCENT

MANOR

Jacksonville, Arkansas 72076

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James H. Johnson, Administrator

Licensed physician urgently needed for Blood Plasma Center in Little Rock, Arkansas. Ideal candidate is a retired or semi-retired M.D. to work a 40-hour week or split a 40-hour week with another physician. Younger man acceptable.

Contact:

Barbara Barnard, District Manager,
American Blood Components,
501-374-6371

or write

American Blood Components,
607 Delmar Blvd.,
St. Louis, Missouri

Rondomycin[®]

(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.

WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**

Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)

Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.

Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)

All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.

Tetracyclines are present in milk of lactating women taking tetracyclines.

To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.

Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.

PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.

In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.

Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.

In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).

Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.

Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.

ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms) anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.

Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).

Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).

Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.

Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.

Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.

Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands, no abnormalities of thyroid function studies are known to occur.

USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea. In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.

For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.

Eaton Agent pneumonia: 900 mg daily for six days.

Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.

Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.

Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.

In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.

In streptococcal infections, a therapeutic dose should be given for at least 10 days.

SUPPLIED: 'Rondomycin' (methacycline HCl) 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73



WALLACE PHARMACEUTICALS
CRANBURY, NEW JERSEY 08512



Food Talk

Creo Jones*

Over the past quarter century it has been observed that the trend of interest in this great nation referred to as the "food basket of the world" has been shifting constantly. The consumer has moved from the concept of a balanced diet derived from the relatively few basic raw foods to the more sophisticated refined products extracted from the raw foods. Thousands of pre-fabricated and synthetic foods also are presently demanded by and supplied to the consuming public. This nation is blessed with the scientific expertise in food technology which has been responsible for such fantastic accomplishments and, no doubt this trend is only the beginning. The different food items presently found on the shelves of large supermarkets of our nation number into the thousands compared to the few basic foods of the past expected to be found on shelves of the neighborhood grocery store, most of which were formulated in the home kitchen at the time of serving.

It is a wonderful age of such convenience. However, every new phase is accompanied by new problems and greater responsibilities to industry, as well as to regulatory officials in assuring final products to be safe, wholesome, informatively labeled and truthfully advertised. Every Federal and State Law and Regulation was designed to protect the consumer.

The consumer has the right to assume that every food product offered for sale is from an approved source, is clean and was processed under good manufacturing practices. He must assume that every permissible food additive is listed as G.R.A.S. ("Generally Recognized as Safe") by the Federal Food and Drug Administration (F.D.A.) and is accepted by the States or is

within set tolerances by F.D.A. to assure safe usage.

The labeling of any food at the retail level is required to inform the consumer of the correct product name, ingredients listed in the descending order of their predominance, net contents and the name and address of the manufacturer, packer or distributor. With such information, the consumer can compare similar products having other added ingredients should an allergy be a problem in his family. The net contents and price of one package can be compared with a competitive package that seems to be larger and the responsible company or person may be held liable if the contents are not as represented.

The gray areas in labeling are most confusing and seem to be expanding as new products reach the market place. The food industry seems to strive to create new products that resemble common basic expensive foods and insinuate with labeling and/or advertising that the new item is essentially equal to if not superior to the foods imitated. For example the various cheese products, including processed and spread varieties resembling cheese in every respect, are displayed and sold from the same areas as are the true cheeses. Most of the original products have been standardized by F.D.A. to assure the consumer he is receiving the authentic food item by name and formula specified by the standard. Only the listed ingredients, in very small print, will inform the consumer he is buying something other than cheese. If a child buys a "cheeseburger", as such, he is entitled to a sandwich of bread, meat and cheese rather than a substitute texturized vegetable protein with cheese food. The label must bear "its common or usual name" and the label must not be deceptive in any

*Division of Food Service, Arkansas Department of Health, 4815 West Markham, Little Rock, Arkansas 72205.

manner according to the Arkansas Food, Drug and Cosmetic Act.

In our humble opinion the meat standards of the Meat Inspection Act as patterned from the Federal Act, as well as the Arkansas Food, Drug and Cosmetic Act, are being violated in allowing industry to prepare hams with 10% added water for which the consumer pays the price of meat. All three Acts state, in effect, that a food shall be deemed to be adulterated if any substance has been added thereto that would lower its quality or strength. A recent survey has indicated that there is no difference in retail price between the watered and non-watered products in different areas. Apparently some middle agency is selling expensive water. Read the label — it should tell you "Water Added" whether in whole, half or sliced form.

Various non-carbonated drinks including those resembling orange juice, grape juice, apple cider, cherry juice and others may be composed of water, artificial flavoring, artificial coloring, citric acid and even a pulp-like additive to make the product appear as the freshly extracted juice of the fruit imitated. The list of ingredients may be the only determining factor in identifying the product. Imitation jellies and jams may be displayed on the grocery shelves along with standardized products. Read the labels, cheaper varieties of inspected minced canned meats are likely to contain wholesome meat byproducts, but a closer look at the list of ingredients ranging from udders to lips may change the appetite.

Some items of food supplement referred to as special formula, dietetic, fortified, etc., under fanciful names may be deceptive in some respect and should be considered very carefully. For example, a formula for a product may contain powdered milk as the major ingredient with a minute amount of bone meal or other minor items added as fortifying agents. The vitamins and minerals, even though minute, are all listed and most of them may be accounted for in the powdered milk that may be purchased at the grocery store for a small fraction of the cost of the supplement.

Organically grown foods which are sold at premium prices are difficult to substantiate and are prime examples for deception.

Many hundreds of gallons of sorghum-flavored blended syrups are delivered into the State and sold principally to roadside fruit stands and the smaller grocery stores as sorghum syrup. The blended syrup consists of a mixture of black strap molasses, corn syrup and sugar syrup. This product is purchased at the large syrup plants for approximately 80 cents per gallon and is sold as sorghum syrup at 4 to 5 dollars per gallon. The sales usually are small but many merchants are convinced that the product is genuine. Merchants caught with this product are prosecuted or the product is contributed to non-profit organizations or both. If this gamble is to be taken by the merchant he should at least require a letter of guarantee from the peddler which would lend some help to the Federal Agencies for interstate shipments and to the State regulatory officials for intrastate products. Many labels bear fictitious names and addresses. Bundles of several different labels have been found under the truck seats of syrup peddlers who have been apprehended. There are very few sources of authentic sorghum syrup of good quality available in the market place.

Textured vegetable protein processed from the soy bean has taken its place in the food realm as the great imitator and no doubt is the most versatile high protein vegetable product that has been brought into use within this century. With appropriate seasoning and flavorings it can be substituted for most any variety of the more expensive meats and meat products and can be made to resemble them in flavor, texture and appearance. This too brings along more problems for regulatory officials since substitution for more expensive products is so likely to occur at the retail level.

The Arkansas food laws and regulations require that all foods are to be sold by their common or usual names and that they are labeled and advertised in such a way as not to be deceptive in any manner.





EDITORIAL

Studies on Oxygen

Alfred Kahn, Jr., M.D.

The aging process has been studied in many ways. W. D. Denckla has published a recent study entitled, "The Role of the Pituitary and Thyroid Glands in the Decline of Minimal Oxygen Consumption With Age" (Journal of Clinical Investigation, Volume 53, Page 572, February 1974). The minimal oxygen consumption and the resting oxygen consumption (BMR) have been found to decrease as the individual ages. The cause of the decline in oxygen consumption has not been known precisely — removal of the pituitary gland and/or the thyroid could produce a decrease in the minimal oxygen consumption. In this study, rats were used as the experimental animal. The thrust of Denckla's work was that some unknown pituitary factor tends to inhibit the stimulus that peripheral tissues get from thyroxine (T-4). For example, immature rats had a greater minimal oxygen consumption than adults. If the pituitary gland is excised, the adult rat's tissue become more responsive to T-4 and the minimal oxygen consumption increases. Excision of the pituitary of young rats prevented the decline of tissue responsiveness to T-4 with regard to minimal oxygen consumption. Moreover, some pituitary extracts have been found, which when given to young rats, decreases their minimal oxygen consumption when stimulated with thyroxine. One of nature's time clocks seems to be an inhibitory effect of the pituitary gland on the thyroid gland.

Another study on oxygen has been published by Liang and Huckabee; it is in two parts and is found in The Journal of Clinical Investigation, Volume 52, Pages 3115 and 3129, December, 1973. The first article concerns, "Mechanisms Regulating the Cardiac Output Response to Cyanide Infusion, A Model of Hypoxia." In this

study, the authors induced hypoxic like metabolic changes by infusing cyanide intra-arterially while allowing the subjects (dogs) to breathe oxygen at normal level of tension. When cyanide is injected in this manner, cardiac output increased within five minutes and reached a peak of 220% of the control value in fifteen minutes and then slowly declined. The authors divided this response to cyanide into three phases. The first phase was apparently not due to the autonomic nervous system, as neither ganglionic blockade nor sympathetic nerve blockade by mecamylamine or bretylium abolished the first phase. The middle stage seemed to be due to substance released by the spleen under sympathetic stimulation. The last phase depended on stimulation of adrenergic receptors. The companion paper which is so to speak a derivative paper, has real clinical significance. It describes "Effects of Splenectomy and Beta-adrenoceptor Blockade on Cardiac Output Response to Acute Hypoxemia." In this latter paper, hypoxia was induced by having the experimental animal breathe an oxygen-nitrogen mixture containing low oxygen content. With an 8% oxygen mixture, the cardiac output increased 38% and with 5% it increased 62%. A beta-adrenergic blockade agent, Practolol, reduced the cardiac to 43% when the subject was 5% oxygen (severe hypoxemia) but it had minimal effect on mild hypoxemia (8% oxygen mixture). Splenectomy caused a profound reduction in cardiac output when stimulated by moderate hypoxemia. With severe hypoxemia, it was less effective. Practolol plus splenectomy virtually abolished the cardiac output increase when the subject was exposed to hypoxemia. Thus, the removal of the spleen is not an entirely innocuous procedure. It interferes with the immune process and may leave

young individuals much more susceptible to infection. Now, it has been shown that the spleen plays an important role in increasing cardiac output in the presence of hypoxemia.

Another interesting project has been reported by Cerny, Dempsey and Reddan. This concerns the effects of low partial oxygen pressure and other gases on the "Pulmonary Gas Exchange In Non-Native Residents of High Altitude." The authors pointed out that natives who live at high altitudes have a higher than normal alveolar capillary diffusion for carbon monoxide. They also again state that this is associated an increased pulmonary capillary blood volume and membrane diffusing capacity. The point of the study was to determine if people living at low altitudes made the adaptation to high altitudes that natives of high altitudes possess. Their re-

sults indicated some age differences in acclimatization; young people showed a more complete acclimatization under conditions of rest and exercise than did the older age group; the alveolar capillary diffusion of the older group resembled the natives only when they exercised moderately or heavily. When residents of low altitudes went to 3100 in the alveolar capillary diffusion increased considerably above normal both at rest and with exercise. These results approached those of the natives. The membrane diffusing capacity increased greatly when native lowlanders went to high altitudes — about 70%. How the lung is able to accomplish this is not clearly understood. It is highly significant, however, that there are objective means to measure some of the body's adaptive processes to low partial oxygen pressure at high altitude.



THINGS TO COME

The Arkansas Speech and Hearing Association, Inc., will hold its annual spring convention April 19 and 20 at the North Little Rock Holiday Inn, North Little Rock, Arkansas. The Association consists of speech pathologists, speech therapists, and audiologists committed to helping the speech and hearing handicapped in the State. The program planned for this meeting features two individuals in the fields of speech pathology and audiology. Dr. Empress Zedler, Professor and Chairman of Special Education at South West Texas State University, will present a program on language disorders in children, specifically childhood aphasia, and Dr. James Jerger, Professor of Audiology in the Department of Otolaryngology at Baylor College of Medicine, will speak on the nature of central auditory disorders. Dr. Zedler's presentation is to begin Friday, April 19, at 10:45 A.M., and Dr. Jerger is scheduled to speak Saturday, April

20, at 10:15 A.M. The program for Saturday also includes a representative from Blue Cross-Blue Shield who will discuss recent legislation in regard to Medicare. Both presentations should be of great interest to individuals dealing with the handicapped. Registration fees for non-members of the Association are \$8.00 for both days, or \$4.00 for Saturday only. For more information or preregistration forms, contact Ms. Terri Johnson, President-Elect ArkSHA, Handicapped Children's Center, 4815 W. Markham, Little Rock, Arkansas 72201, telephone: 661-2328.

Trauma Clinical Symposium

A two-day clinical symposium for physicians on "Management of Life-Threatening Problems in the Emergency Department" will be held at the Hilton Inn, Tulsa, on June 6 and 7, 1974. The meeting will be sponsored by Saint Francis Hospital, Tulsa; the American College of Surgeons Oklahoma Trauma Committee; the Oklahoma Division of the American Trauma Society; and the Oklahoma Trauma Research Society. Enrollment fee is \$75, which includes luncheons and reception. Interested physicians should contact the Oklahoma Trauma Research Society, Suite 811, 6465 South Yale, Tulsa, Oklahoma 74136. Phone (918) 663-1577.

RESOLUTIONS



RESOLUTION

WHEREAS, the members of the Pulaski County Medical Society note with sincere sorrow the death of their colleague, Dr. William Alexander Lamb; and

WHEREAS, Dr. Lamb had been a member of this Society for sixty four years; and

WHEREAS, his contributions to the cause of organized medicine and to the betterment of the health of countless persons in this area for many years have been invaluable;

BE IT THEREFORE RESOLVED:

THAT: this resolution be made a part of the permanent Archives of this Society; and

THAT: a copy of this resolution be sent to Dr. Lamb's family as an expression of deep sympathy of his colleagues; and

THAT: a copy of this resolution be sent to the Journal of the Arkansas Medical Society for publication.

By Direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Robert Watson, M.D.
Henry Hollenberg, M.D.

Approved:
Executive Committee
February 20, 1974

* * *

RESOLUTION

WHEREAS, it is noted with sincere sorrow by the members of the Pulaski County Medical Society the recent death of one of its former members, Dr. A. C. Curtis; and

WHEREAS, while he was a member of this Society, Dr. Curtis was prominent in the activities of the Society; and

WHEREAS, his record as a humanitarian member of the profession in subsequent years is one which will seldom be surpassed;

BE IT THEREFORE RESOLVED:

THAT: this resolution be made a part of the permanent records of this Society, and

THAT: a copy of this resolution be forwarded

to Dr. Curtis' family as an expression of sincere sympathy, and

THAT: a copy of this resolution be forwarded to the Journal of the Arkansas Medical Society for publication.

By direction of the Memorials Committee
T. Duel Brown, M.D., Chairman
Robert Watson, M.D.
Henry Hollenberg, M.D.

Approved:
Executive Committee
February 20, 1974

* * *

RESOLUTION

WHEREAS, God, in his infinite mercy has seen fit to call from our midst at an early age, Dr. G. K. Patton, and

WHEREAS, Dr. Patton has faithfully served his patients in the community at large throughout his entire medical career, and

WHEREAS, Dr. Patton, during his years of practice has reflected the highest ideals of his profession, and,

WHEREAS, in his devotion to family, church, and friends, he exemplified the best in man, and

WHEREAS, The Sebastian County Medical Society mourns his loss;

Therefore, be it resolved, by the Sebastian County Medical Society, in its regular meeting on March 12, 1974, hereby adopts this resolution and directs that a copy be spread on the minutes of the society and that a copy be furnished the family and that a copy be published in the Journal of the Arkansas Medical Society.



ANSWER—Electrocardiogram of the Month

Slow rate, without apparent P waves. QRS duration = 0.22 or more. QRS configuration is bizarre, though if it were condensed into 0.10 sec it might look like left axis deviation. This tracing is typical of hyperKalemia. This patient's serum K+ at time of the first tracing was 8.0 mEq/l. Bicarbonate, insulin, glucose and subsequently peritoneal dialysis lead to a progressive improvement in his ECG. The initial response is shown in the 2nd tracing which probably represents a slow junctional rhythm. The ST segment in V-5 is very abnormally depressed and down-sloping — compatible with L.V. ischemia and/or dig effect. Severe hypertension and aortic insufficiency as in this patient could produce these ST segment changes, even with perfectly "clean" coronary arteries.

MEDICINE IN THE



THE MONTH IN WASHINGTON

The American Medical Association has branded as "wrong medically, wrong morally, and wrong legally" the Health, Education, and Welfare Department's proposed regulation requiring pre-hospital-admission certification for Medicare and Medicaid patients.

In what appeared as an ending to a "deliberate effort on the part of the AMA over the past four or five years to cooperate with HEW," the Association announced that if the pre-admission certification regulation and the Professional Standards Review Organizations area designations were placed into effect, HEW Secretary Casper Weinberger would be taken into court.

AMA President Russell B. Roth, M.D., and Board Chairman James H. Sammons, M.D., at a press conference in Chicago made the following statement:

"We are here today to serve notice on Secretary Weinberger that if he proceeds with two proposed actions, we are going to take him to court.

"Earlier this month, the Secretary of the Department of Health, Education, and Welfare issued a set of proposed regulations that would require pre-admission certification for Medicare and Medicaid. If adopted as proposed they would require that every Medicare and Medicaid patient be cleared by a Utilization Review Committee before admission to a hospital. The only exception would be emergency cases.

"These regulations are a direct threat to the medical care of the 35 million or so patients who are served by Medicare and Medicaid. For most of them, the withholding of Medicare or Medicaid hospital benefits will mean that the individual will be denied hospitalization because they have no other means to pay for their care.

"Furthermore, such decisions would not be made on the basis of an examination of the patient by physicians. Rather, they would be paper decisions. The verdict would be rendered on the basis of what the patient's doctor put

down on the record. It is likely that, as a practical matter in many instances, the decision would not be made by a committee of physicians or even a single physician but by an admitting nurse or other hospital administrative personnel.

"Any such denial of medical care represents a clear violation of both the spirit and the letter of the Medicare-Medicaid law. Congress clearly established the programs to provide medical care for the elderly and the poor. What the Congress has given, the Secretary now seeks to take away. The Secretary has no authority under the guise of regulations to amend the law and reduce benefits. He has no moral or legal right or authority to do so. Indeed, his action is as illegal as it is reprehensible. The Medicare-Medicaid law provides for pre-admission certification by the patient's physician and for post-admission review by hospital utilization review committees. The Congress did not intend that a committee substitute a paper decision for the judgment of a patient's physician. The Secretary's proposal is a direct and clear violation of Section 1801 of the Medicare-Medicaid law.

"We intend to fight Mr. Weinberger on this. His proposed regulations are wrong medically, wrong morally, and wrong legally. We are here to serve notice on the Secretary that if he persists in putting the regulations into effect, the AMA will seek an injunction on that very same day to stop him.

"We would welcome support from all interested parties, such as senior citizen organizations and consumer groups. We would hope they would join in our action. But with them or without them, we will be in court on the day those regulations are promulgated.

"While we are in a suing mood, let me mention that we are also going to take on Mr. Weinberger in another area.

"This involves his gerrymandering of the PSRO district. Without getting too involved, let me say for those of you who don't know, PSRO stands for Professional Standards Review

Organizations. These are supposed to be groups of doctors set up to review the quality and medical necessity of care given under Medicare and Medicaid.

"The AMA originally opposed PSRO. But once it became law, we decided that if such review was going to be done it would be better for all concerned if it were done by physicians.

"We decided to cooperate with HEW in the implementation of the law. I can tell you, we've had very little cooperation in return.

"Peer review — the concept on which PSRO is based — was invented by the medical profession and was in existence long before the government ever heard of the idea. There are many excellent and functioning peer review programs now in effect in this country, and we asked the Secretary to set up the PSRO designated areas (regional units) so as not to disturb them.

"This plea apparently fell on deaf ears. I won't hazard a guess as to the reason behind the Secretary's area designations. I don't think there were any. I think the decision was simply capricious and arbitrary.

"Our Board of Trustees has voted to join with any of our state organizations who want to go to court to upset the area designation in their state. Our preliminary indications are that seven or eight may do so.

"Let me say in closing that over the past four or five years we have made a deliberate effort to cooperate with HEW in implementing government programs for the benefit of the people. I think for a while there was good communication and good cooperation.

"That day apparently has passed. Of late we've had nothing but rebuff after rebuff. We've now been left with no recourse but to fight in our best interests and, we believe, in the best interests of our patients."

* * * *

Physician fees in 1974 have been ordered held to a four per cent increase by the Cost of Living Council.

Despite strong arguments from physician groups including the AMA for an exemption from all wage and price controls for the medical profession, the Council refused to step back from its November proposal to impose the four per cent ceiling.

As in November regulations, physicians under Phase IV will be permitted an annual aggregate fee increase of four per cent. A ten per cent maximum fee increase is allowed for specific charge items; fees under \$10 can be raised by \$1.

The limits are effective as of the first of this year. They remain legally in effect until April 30 by which time Congress must authorize an extension of the President's powers to impose wage-price controls or they will expire. There is growing sentiment in the Senate and the House to terminate the program.

The regulations in the health field have been under court attack. Nursing homes have won a preliminary legal battle in their suit against the Phase III controls. The American Hospital Association has threatened to challenge the controls in court.

Hospitals were restricted to a 7.5 percent increase per in-patient stay, with adjustments for volume changes.

Under the final regulations, all physicians must maintain a schedule showing prices in effect on December 28, 1973, which comprises 90 per cent of their revenues, and the subsequent changes and dates. "A conspicuous and easily readable sign" must be posted stating the availability and location of the price schedule. The requirement applies whether or not fees have been increased.

The Council said that physicians and medical laboratories that have not raised charges as allowed in the past will be allowed to apply the unused portion of increase up to a maximum of five per cent.

* * * *

President Nixon is enthusiastically endorsing the Health Maintenance Organizations program effort getting underway at the HEW Department, according to federal health officials.

The government is "going all out" to implement the new law "as rapidly as possible," Charles Edwards, M.D., Assistant HEW Secretary for Health, said.

Proposed regulations to carry out the HMO program will be issued by the end of March.

At a briefing of health reporters, Dr. Edwards announced that the director of the HMO program is Frank Seubold who has been serving as Deputy Director of the old HMO office as well

as Associate Director of the Bureau of Community Health. Seubold, 51, is a PhD chemist who came to HEW in 1971 after a career in the aerospace industry in California during which he became increasingly involved in space medicine and medical systems management work.

With respect to the new HMO law that authorizes \$375 million over the next five years, Dr. Edwards said that for the first time the government is going to be making changes in the economic base of health care delivery in this country. The HMO concept attains added importance, he told reporters, as the Administration and Congress move on national health insurance proposals.

* * * *

Health outlays last fiscal year for the nation reached \$94.1 billion, an 11 per cent increase, the lowest rate in several years. The proportion of total health spending to the Gross National Product remained at the 1972 level—7.7 per cent. Per capita expenditures rose \$41 to \$441, including private and government spending.

The Social Security Administration's preliminary figures for the fiscal year that ended last July showed per capita private spending on health of \$265 and government spending of \$176 per person for the year.

The ratio of public versus private health spending continued the trend of two decades toward more government spending. The ratio for fiscal 1973 was 60.1 per cent private and 39.9 per cent public. In 1928, the corresponding ratio was 86.7 per cent and 13.3 per cent.

Of the \$94 billion total, \$36 billion went for hospital care, \$18 billion for physicians' services, compared with \$32.6 billion and \$16.6 billion the previous year.

Federal spending was estimated at \$24.6 billion, up almost \$2 billion; state and local, \$12.9 billion, up more than \$1.5 billion.

Expenses for prepayment and administration, largely private health insurance expenses, rose from \$2.4 billion in fiscal 1972 to \$3.3 billion in fiscal 1973.

* * * *

The American Medical Association recognizes that supplemental printed information given to the patient by the pharmacist at the physician's

discretion would be valuable for certain classes of drugs.

However, the AMA stated at a Washington, D. C., conference on patient drug information that the preparation and distribution of such informational material pose a number of problems.

"Patients differ in their drug requirements with respect to dose, duration of therapy and adjunct medication. They also differ in therapeutic response, adverse side effects and toxic reactions. The information in a 'patient package insert' might be helpful to some patients but might confuse, frighten or even harm other patients."

The meeting of medical, drug and consumers representatives was told by an AMA spokesman that the usefulness of a patient package insert should be explored for a limited number of drugs. The AMA, the Food and Drug Administration and the manufacturer could cooperate in preparing informational material on a limited number of drugs, selected because they are used over a long period of time or have a high incidence of interaction with other drugs.

The acceptance of such material by patients and physicians and the impact it might have on the way in which patients used drugs should be assessed before encompassing a large number of therapeutic agents in the program, according to the AMA.

The FDA has been considering steps to broaden the package insert to assure it reaches patients for many drugs.

* * * *

Dr. John Zapp, D.D.S., Deputy Assistant Secretary for Legislation of the HEW Department, is resigning to join the Washington office of the AMA as Director of the Department of Congressional Relations.

Dr. Zapp has been at HEW since 1969. He held a variety of posts including Deputy Assistant Secretary for Health Manpower. The 41-year-old official has been involved with health legislation for several years and has served as federal representative to the AMA-American Medical Colleges Liaison Committee on Medical Education.

Dr. Zapp will replace William Colley as the head of AMA's Congressional Relations Department.

Faculty Positions Available In Family Practice

The Department of Family and Community Medicine at the University of Arkansas School of Medicine announces availability of full time positions on the faculty for Family Practice. These positions involve direct patient contact and responsibility for residents at 1st, 2nd, and 3rd year level. Each faculty member would have a major responsibility for one patient care unit such as a Family Practice Model Office, and will share rotation call and teaching duties with the other members of the department. Salaries and appointments are on an annual scale with funding from state, federal, and private sources. The three positions in affiliated programs include the responsibility for planning and development of the residency program in the Area Health Education Centers.

Major criteria to be considered in selection and level of appointment or salary are board eligibility or board certification, quality of practice, interest in teaching, type and duration of practice, and support for the broad objectives of Family Practice residency training. Interested parties should submit a copy of their curriculum vitae to John M. Tudor, Jr., M.D., Acting Chairman, Department of Family and Community Medicine, University of Arkansas School of Medicine, 4301 West Markham, Little Rock, Arkansas 72201.

Information From Insurance Committee

Dr. Harry Hayes, Jr., Chairman of the Insurance Committee of the Arkansas Medical Society, requested that the following resolution be published as an item of interest to the membership. The resolution was adopted by the Ohio State Medical Association in 1973.

"Insurance Companies Inimical to the Private Practice of Medicine

WHEREAS, Some Insurance Companies propose to render legal aid to their contractees when said contractees will refuse to pay the reasonable and customary fee submitted by a Private Practicing Physician for services rendered but, would rather prefer to pay a proposed "allowed" fee advised by the insurance company, and

WHEREAS, This proposed, espoused concept is inimical to the Preservation of Freedom in the Private Practice of Medicine necessary for the

fuller mutual benefit of Patients and Physicians alike, and THEREFORE, BE IT RESOLVED.

1. That the names of the Insurance Companies who are advocating this alien philosophy be made known to all the members of the Ohio State Medical Association.
2. That each member, thereafter, take appropriate action, in his best judgment, necessary to continue to preserve an atmosphere of Freedoms for both Patient and Physician alike; this atmosphere being necessary to enhance mutual respect, trust, and dignity — which are necessary for the mutual benefit of Patients and Physicians alike.
3. That each State Medical Association receive a copy of this Resolution from the Ohio State Medical Association."

MONEY SAVING INSURANCE SERVICE FOR PHYSICIANS

Ever wish you had your own insurance company? Physicians in Arkansas have just that, in effect, when they participate in a dividend program for Workmen's Compensation Insurance approved by the Arkansas Medical Society.

Under this program, policyholders pay no more than other companies charge, yet they participate in whatever savings (dividends) are earned in their savings class. Best dividends are earned when injury claims are kept to a minimum.

The highest returns under this service are achieved by maintaining careful hiring procedures and safe operation. Special accident prevention counseling is offered without charge and safety experts provide specific suggestions for earning a good safety record. The success of these efforts is measured in each year's dividends for policyholders.

Each participant is issued his own standard Workmen's Compensation policy and claims are handled by local representatives. Dividends are based on the cost of claims paid for participating physicians in Arkansas.

The program is underwritten by CASUALTY RECIPROCAL EXCHANGE, a member of the Dodson Insurance Group, 92nd Street and State Line, Kansas City, Mo. 64114.



PERSONAL AND NEWS ITEMS

Film Shown at International Meeting

Dr. Harry Hayes, Jr., of Little Rock, has shown his film "Wound Healing I. Secondary Intention" to the International Symposium on Wound Healing in Rotterdam, the Netherlands. The Symposium was April 8-12, 1974, and was sponsored by Erasmus University.

Doctors Honored

The Murfreesboro Chamber of Commerce held an "Open House" recently in honor of the city's two physicians, Dr. Hiram T. Ward and Dr. James Turbeville. Dr. Turbeville has just recently relocated his practice, moving from Nashville.

Physician Attends Seminar

Dr. Boyce West of Clarksville recently attended a seminar on Early Detection and Treatment of Carcinoma of the Breast at the Kansas City, Missouri, Medical Center.

Physicians Locate

Dr. Clifford L. Evans of Morrilton has announced the association of Dr. Franklin Wilson as a permanent part-time member of the Family Medicine Clinic in Morrilton. Dr. Wilson is a native of Appleton, Minnesota.

Dr. Robert A. Etherington has announced that Dr. Fernando J. Pascual will be associated with the Eureka Clinic in Eureka Springs. Dr. Pascual, who will be in general practice, has been in general practice in Douglas, Arizona, for the past seven years. The Physician Placement Service of the Arkansas Medical Society assisted Dr. Pascual in making contacts with physicians in Arkansas.

State Physician/Authors Published

The March 1974 issue of the Southern Medical Journal published the article "Carcinoid of the Duodenum" by Dr. John Robert Sellars and Dr. Fred T. Caldwell, both of Little Rock.

Dr. W. R. Keadle Speaks

Dr. W. Ray Keadle of Glenwood recently addressed the Caddo Country Ruritan Club on

activities and training of the Glenwood Rescue Unit and other first-aid programs in their area.

Physicians Receive Recognition

We have received notification that the following member-physicians have been named as recipients of the 1972-73 American Medical Association's Physician Recognition Award: Charles R. Baker, Little Rock; Sam Koenig and Eugene F. Still, Fort Smith; Jim E. Lytle, Batesville; Jack L. Royal, Texarkana; and Frank G. Thibault, Benton.



NEW MEMBERS

Dr. Noel W. Cowan

Dr. Noel W. Cowan, a native of Lampasas, Texas, is a new member of the Miller County Medical Society. He received his B.A. degree from Howard Payne College, Brownwood, Texas, in 1962. Dr. Cowan received his M.D. degree from the University of Texas Medical School at Galveston in 1967. His internship and residency work was completed at the University of Texas Medical Branch Hospital in Galveston, Texas.

Dr. Cowan began the practice of Pediatrics at the Southern Clinic in Texarkana, Arkansas, in 1970.

Dr. Jon D. Hall

Miller County Medical Society has recently added the name of Dr. Jon D. Hall to its membership roll. Dr. Hall is a native of Fayetteville, Arkansas.

Dr. Hall received his B.A. degree from the University of Arkansas at Fayetteville in 1962.

He received his M.D. degree from the University of Arkansas School of Medicine in 1966. Dr. Hall interned at St. John's Hospital in Tulsa, Oklahoma, and did his residency work at the University of Arkansas Medical Center in Little Rock. Dr. Hall is a member of the American Academy of Pediatrics, Arkansas Chapter.

Since 1970 he has been practicing pediatric medicine at the Southern Clinic in Texarkana, Arkansas.

Dr. G. Doty Murphy, III

Dr. G. Doty Murphy, III, is a new member of the Polk County Medical Society. He is a native of El Dorado, Arkansas.

Dr. Murphy received his B.A. degree from Rice University in Houston in 1963. In 1967, he was graduated from the University of Arkansas School of Medicine in Little Rock with an M.D. degree. His internship was taken at the University of Arkansas Medical Center in Little Rock, and he completed his residency in pediatrics at the University of Mississippi. Dr. Murphy served with the United States Public Health Service in Tennessee. He has served as a Clinical Instructor in Pediatrics at the University of Arkansas Medical Center and in 1972-73 was the Director of the Division of Communicable Diseases at the Arkansas State Department of Health.

Dr. Murphy is associated with Dr. Calvin D. Austin in the general practice of medicine and pediatrics in Mena.

Dr. Jack T. Patterson

Dr. Jack T. Patterson is a new member of the Johnson County Medical Society. He is a native of Fort Smith, Arkansas.

Dr. Patterson received his Bachelor of Science degree from the College of the Ozarks in 1965. He was awarded a Master of Science degree in 1968 from the University of Arkansas in Fayetteville. Dr. Patterson was graduated from the University of Arkansas School of Medicine in 1971. His internship and residency work was completed at John Peter Smith Hospital in Fort Worth, Texas.

Dr. Patterson is associated with the Clarksville Medical Group in the general practice of medicine at Clarksville.

Dr. Clyde H. Underwood

A new member of the Johnson County Medical Society is Dr. Clyde H. Underwood. He is a

native of Quitman, Arkansas. Dr. Underwood received his B.S. degree from Arkansas State Teachers College in Conway in 1959. He was graduated from the University of Arkansas School of Medicine in Little Rock in 1966. Dr. Underwood interned at St. Vincent's Infirmary in Little Rock.

Dr. Underwood has been in the general practice of medicine in Clarksville since 1968.

Dr. Eugene Fountain Still, II

Dr. Eugene F. Still, II, is a new member of the Sebastian County Medical Society. He is a native of Rocky Mount, North Carolina.

Dr. Still attended Duke University and was graduated from Vanderbilt University with a B.A. degree in 1959. He received his M.D. degree from the University of Arkansas School of Medicine in 1966. Dr. Still completed his internship at the University of Arkansas Medical Center in Little Rock in 1967. His residency work in General Surgery was completed in 1971 at the University of Tennessee Medical School. Dr. Still completed his Plastic Surgery residency at the University of Missouri Medical School in Kansas City, Missouri, in 1973.

He is a member of Pan-American Medical Association, Section of Plastic Surgery and Burns; Alpha Omega Alpha; a candidate for the American College of Surgeons, and a candidate for the American Society of Plastic and Reconstructive Surgeons.

Dr. Still is associated with Holt-Krock Clinic in Fort Smith, practicing Plastic Surgery.

Dr. Donald Lee Patrick

Dr. Donald Lee Patrick, a native of Jacksonville, Florida, is a new member of the Sebastian County Medical Society. In 1962 he was graduated from Baylor University with a B.A. degree. Dr. Patrick was graduated from the University of Florida College of Medicine in 1966. His internship was completed in 1967 at Parkland Memorial Hospital in Dallas, Texas. Dr. Patrick completed residencies at Mayo Clinic, Rochester, Minnesota, in General Surgery in 1971, and in Thoracic Surgery in 1973. He is Board Certified in General Surgery.

Dr. Patrick is associated with Holt-Krock Clinic in Fort Smith and practices General and Thoracic Surgery.

Dr. Maurice Clark (Rick) Martin

Sebastian County Medical Society has accepted

for membership Dr. Rick Martin, a native of Neosho, Missouri.

Dr. Martin received an A.A. degree from Westark Community College in 1966. He was graduated from Arkansas Polytechnic College, Russellville, in 1968. Dr. Martin was graduated from the University of Arkansas School of Medicine in 1972. His internship was served at Hillcrest Medical Center in Tulsa, Oklahoma, in 1973.

Dr. Martin is associated with Drs. Kutait, Lilly, Pillstrom and Ingram in the Family Practice at 1120 Lexington, Fort Smith.

Dr. Charles Stewart Cunningham

The Sebastian County Medical Society has accepted for membership Dr. Charles Stewart Cunningham. Dr. Cunningham is a native of Afton, Oklahoma.

Dr. Cunningham received his B.A. degree from the University of Oklahoma in 1943 and was graduated from the University of Oklahoma Medical School in 1945. He served his internship at a United States Naval Hospital. He has served as a preceptor for the University of Oklahoma Medical School. Dr. Cunningham practiced general medicine in McAlester, Oklahoma, for two years, and Poteau, Oklahoma, for twenty-three years.

He is a member of the Southern Medical Association and the American Academy of Family Physicians.

Dr. Cunningham is an Emergency Room physician at Sparks Regional Medical Center in Fort Smith.

Dr. John Rollins Pope

Dr. John Rollins Pope is a new member of the Sebastian County Medical Society. Dr. Pope is a native of Gorman, Texas. He received his B.S. degree in Pharmacy from the University of Texas in Austin in 1962. Dr. Pope was graduated from the University of Texas Southwestern Medical School in Dallas in 1968. He completed his internship at the Veterans Administration Hospital in Dallas and did residencies in Internal Medicine and Cardiology at the same hospital. He held a Cardiology Fellowship at Dallas Veterans Administration Hospital from 1971-1973.

Dr. Pope is associated with Holt-Krock Clinic in Fort Smith practicing Cardiology and Internal Medicine.

Dr. Bob W. Smith

Craighead-Poinsett County Medical Society has accepted for membership Dr. Bob W. Smith. He is a native of Little Rock, Arkansas.

Dr. Smith attended Central State College in Edmond, Oklahoma, and State College of Arkansas in Conway. He was graduated from the University of Arkansas School of Medicine in 1966. He completed his internship at the University of Oklahoma Hospitals in Oklahoma City. Dr. Smith served in the United States Air Force from 1966 to 1972 and completed one year of residency in Neurosurgery at Wilford Hall United States Air Force Hospital in San Antonio, Texas. He was in general practice in 1973 in West Memphis, Arkansas, and is a member of the American Academy of Family Physicians.

Dr. Smith is associated with Dr. G. Wayne Taylor at the Taylor-Smith Clinic, 211 East Matthews, Jonesboro.

Dr. Gary Vernon Felker

Dr. Gary Vernon Felker is a new member of the Sebastian County Medical Society. He is a native of Fort Worth, Texas.

Dr. Felker was graduated from the University of Arkansas, receiving his B.A. degree in 1965. In 1969 he was graduated from the University of Arkansas School of Medicine. He completed a rotating internship at Saint Francis Hospital, Wichita, Kansas, in 1970. His residency work in Ophthalmology was completed in 1973 at the University of Missouri Medical School in Columbia, Missouri. He is a member of the Missouri Ophthalmology Society and is a candidate in the American College of Surgeons.

Dr. Felker is in the solo practice of Ophthalmology in Fort Smith at 912 Lexington Avenue.

Dr. Marshall Larry Hyde

The Sebastian County Medical Society has accepted Dr. Marshall Larry Hyde for membership. He is a native of Rockford, Illinois.

Dr. Hyde was graduated from the University of Minnesota in 1962. He was graduated from the Kansas University Medical Center in 1967. His internship was completed at Wesley Hospital, Wichita, Kansas, in 1968; and in 1971 he completed his residency work at Kansas University Medical Center. He served in the United States Navy for two years at Orlando Naval Hospital, being discharged in 1973. He is a Junior Fellow in the American College of Gynecology.

Dr. Hyde is associated with Obstetrical and Gynecological Associates, P.A., 408 South 16th Street in Fort Smith.

Dr. Dennis R. Fecher

Dr. Dennis R. Fecher has been accepted for membership in the Sebastian County Medical Society. He is a native of Little Rock, Arkansas. Dr. Fecher attended Arkansas State University, Beebe Branch, and was graduated from Hendrix College in Conway. He received his M.D. degree from the University of Arkansas School of Medicine in 1968. Dr. Fecher completed his internship and had an Internal Medicine and Hematology Fellowship at the University of Minnesota Hospital. He is Board Certified by the American Board of Internal Medicine.

Dr. Fecher is associated with Holt-Krock Clinic practicing Internal Medicine and Hematology in Fort Smith.

Dr. David Allen Denman

The Benton County Medical Society has recently added the name of Dr. David Allen Denman to its membership roll. Dr. Denman is a native of Fort Smith, Arkansas.

Dr. Denman attended John Brown University at Siloam Springs and the University of Arkansas, where he received his B.S. in 1958. He was graduated from the University of Arkansas School of Medicine in 1968. His internship was completed at Duke University Medical Center in 1972 and Charlotte Memorial Hospital in 1973. He is Board Certified by the American Board of Pathology.

Dr. Denman is practicing Pathology at the Rogers Memorial Hospital in Rogers.

Dr. Thomas William Amsden, Jr.

A new member of the Sebastian County Medical Society is Dr. Thomas William Amsden, Jr. He is a native of New Haven, Connecticut.

Dr. Amsden was graduated from the University of Oklahoma with a B.S. degree in 1964. He was graduated from the University of Oklahoma Medical School in 1968. He completed his internship and residency in Medicine and Hematology at the University of Minnesota Hospital in Minneapolis. He is Board Certified in Medicine and Hematology. Dr. Amsden was an Assistant Professor of Medicine in 1972-73 at the University of Minnesota Hospital.

He is now associated with Holt-Krock Clinic in Fort Smith as a Hematologist.

Dr. James David Busby

Dr. James David Busby is a new member of the Sebastian County Medical Society. He is a native of Brownwood, Texas.

He received his B.S. degree from Ouachita Baptist University in Arkadelphia, Arkansas, in 1966. He was graduated from the University of Tennessee College of Medicine in Memphis in 1970. Dr. Busby completed a rotating internship at Methodist Hospital in Memphis in 1971. He was in general practice in Huntsville, Arkansas, from 1971 to 1973.

Dr. Busby is an Emergency Room physician at Saint Edward Hospital in Fort Smith.

Dr. Steven K. Wilson

The Sebastian County Medical Society has accepted Dr. Steven K. Wilson for membership. He is a native of Fort Smith, Arkansas.

Dr. Wilson attended Yale University and was graduated from the University of Virginia Medical School in 1966. He completed his internship at the University of Virginia Medical School. Dr. Wilson completed residency work in both General Surgery and Urology at the Vanderbilt University School of Medicine in Nashville, Tennessee. Dr. Wilson served as Flight Surgeon at Luke Air Force Base in Glendale, Arizona, from 1967-69. He was an Instructor in Urology at Vanderbilt in 1973.

He is currently practicing Urology at Holt-Krock Clinic in Fort Smith.

Dr. William B. Tate

Dr. William B. Tate has been accepted for membership in the Sebastian County Medical Society. He is a native of Little Rock, Arkansas.

He attended Texarkana College and Harding College in Searcy, Arkansas. He was graduated from the University of Arkansas School of Medicine in 1967. Dr. Tate did his internship and residency work at Confederate Memorial Medical Center, Shreveport, Louisiana. He served two years in the United States Air Force and was the Chief of the Obstetrics and Gynecological Services at the USAF Hospital, Robins Air Force Base, Georgia.

Dr. Tate is practicing Obstetrics and Gynecology at Holt-Krock Clinic in Fort Smith.



OBITUARY

Dr. Charles E. Garratt

Dr. Charles E. Garratt of Hot Springs died February 24, 1974. He was born March 31, 1894, in Hot Springs.

Dr. Garratt was graduated from the Tulane University School of Medicine in 1916 and practiced medicine in Hot Springs for more than fifty years before his retirement.

He was a member of the Garland County Medical Society, the Arkansas Medical Society, and the American Medical Association.

Dr. Garratt is survived by his widow, Mrs. Lucile W. Garratt.

* * *

Dr. William A. Lamb

Dr. William A. Lamb of Little Rock died at the age of 91 on February 19, 1974. Dr. Lamb was a native of Delight, Arkansas.

Dr. Lamb was the last surviving member of the 1909 graduating class of the University of Arkansas School of Medicine. He retired from active practice in 1961. During his fifty-three years in practice, Dr. Lamb delivered over 5,200 babies.

He was a member of the Pulaski County Medical Society, the Arkansas Medical Society, the American Medical Association, and the Arkansas Society of Anesthesiology. Dr. Lamb also served as the Pulaski County coroner from 1923-1929.

Dr. Lamb is survived by his son, a daughter, two grandchildren, and a great-grandchild.

* * *

Dr. Samuel James Kuykendall

Dr. Samuel James Kuykendall of Little Rock died March 10, 1974. He was a native of Little Rock, born August 22, 1925.

Dr. Kuykendall was a graduate of Vanderbilt University, where he was Phi Beta Kappa in

1946. He was graduated from the Vanderbilt School of Medicine in 1949 and served his internship and residency at Strong Memorial Hospital at Rochester, New York. Dr. Kuykendall won a fellowship to Mayo Clinic and received a master's degree in surgery at the University of Minnesota. At the time of his death, he was a member of the medical staff of Saint Vincent Infirmary and the Baptist Medical Center in Little Rock. He was also a consultant to the Veterans Administration Hospitals at Little Rock and North Little Rock as well as the State Sanitoriums at McRae and Booneville. Dr. Kuykendall was a clinical professor at the University of Arkansas Medical Center. In the Korean War, he served as Chief of Surgery at Carswell Air Force Base, Texas, with the rank of Captain.

Dr. Kuykendall was a member of the Pulaski County and Arkansas Medical Societies, the American Medical Association, a Diplomate of the American Board of Surgery, a Fellow of the American College of Chest Physicians, and a member of the Southwest Surgical Congress.

Survivors include his widow, Mrs. Elizabeth White Kuykendall, and three sons, John H., Davis W., and Samuel J., all of Little Rock.



Woman's
Auxiliary

Auxiliary President Honored

The Board of Directors of the Arkansas Council for Health Careers has recently honored its founder, Mrs. A. S. Koenig, by naming her permanent honorary Chairman of the Board. The Council was incorporated by the Woman's Auxiliary to the Arkansas Medical Society and the Arkansas Medical Society in 1971.

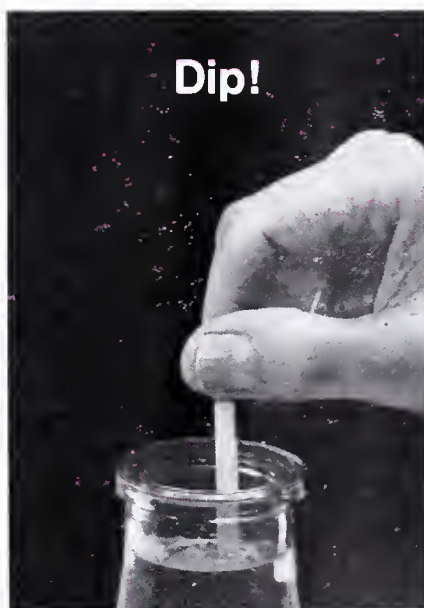


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Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive dis-

orders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant

medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

When you determine that the depressive symptoms are associated with or secondary to predominant anxiety in the psychoneurotic patient, consider Valium (diazepam) in addition to reassurance and counseling, for the psychotherapeutic support it provides. As anxiety is relieved, the depressive symptoms referable to it are also often relieved or reduced.

The beneficial effect of Valium is usually pronounced and rapid. Improvement generally becomes evident within a few days, although

some patients may require a longer period. Moreover, Valium (diazepam) is generally well tolerated. Side effects most commonly reported are drowsiness, ataxia and fatigue. Caution your patients against engaging in hazardous occupations or driving.

Frequently, the patient's symptoms are greatly intensified at bedtime. In such situations, Valium offers an additional advantage: adding an *h.s.* dose to the *b.i.d.* or *t.i.d.* schedule can relieve the anxiety and thus may encourage a more restful night's sleep.

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal

or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred

vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.



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The Problem of Radiation Exposure from the Use of X-Rays for Diagnostic Purpose

A symposium presented as part of
the annual meeting of the Texas Association
for Radiation Research held at Hot Springs,
Arkansas, November 3 and 4, 1972

Radiation exposure following diagnostic X-ray procedures represents a problem of interest and concern to a large number of individuals representing a broad spectrum of activities.

The symposium was designed to allow an exchange of views between a number of individuals involved in the problem of radiation exposure in man. The individuals involved were:

Glenn V. Dalrymple, M.D.

(Chairman of the discussion session)
Professor; Chairman — Department of Radiology
Professor of Biometry, Physiology and Biophysics
University of Arkansas Medical Center

Mary Esther Gaulden, Ph.D.

Emma Freeman Associate Professor of Radiology
University of Texas Southwestern Medical School
Dallas, Texas

David Newbern, M.D.

Radiologist — Radiology Associate
Little Rock, Arkansas

Frank Wilson, B.S., MPH

Director, Environmental Health Services
Arkansas State Health Department

James Vandergrift, B.S., M.S.

Assistant Professor of Radiology
Radiation Safety Officer
University of Arkansas Medical Center

The symposium opened with the paper by Dr. Gaulden. She is a Research Radiation Biologist who is very interested in the effects of low doses of ionizing radiation on man. Following the paper, a panel discussion was held; a portion of the transcription follows:

Possible Effects of Diagnostic X-Rays on the Human Embryo and Fetus**

Mary Esther Gaulden, Ph.D.*

I would like to focus your attention on the possible effects of very low doses of radiation on the embryo and fetus, in other words, to discuss the rationale for avoiding whenever possible the irradiation of the pregnant woman's abdomen. By low doses I mean those encountered in diagnostic radiology.

With increasing public concern about the effects of low doses of radiation on man, it is my impression that physicians are encountering an increasing number of cases in which pregnant women do not want to be exposed to diagnostic radiation or are alarmed that they have been irradiated before being aware of their pregnancy. In a good many instances this alarm is leading to either threatened or real legal action. One cause of public concern is the number of articles which have appeared in the lay press about the "hazards" of medical radiation, for example, "Warning, X-rays May Be Dangerous to Your Health", which appeared in *Reader's Digest* in August, 1972.

Medical-dental radiation is the major source of man-made radiation exposure of the population. The magnitude of this exposure is indicated by the latest published figures for the United States which are given in Table I. Note

TABLE I

A. Population exposure to medical-dental radiation, 1964*

Type exam	# Individuals
Radiographic	66,000,000†
Fluoroscopic	7,800,000†
Dental	46,000,000

* From I. N. Gitlin and P. S. Lawrence, Population Exposure to X-rays, U. S., 1964. PHS Publ. #1519.
†Estimated to be increasing at 1-4%/year.

B. Population exposure to medical radionuclides*

Year	# Patient Doses
1959	400,000
1971	4,000,000**

*D. W. Moeller, Meeting Radiological Health Manpower Needs, Am. J. Public Health, 61:1938 (1971).
**Increasing about 20%/year.

*Emma Freeman Associate Professor of Radiology, Radiation Biology Section, Department of Radiology, Southwestern Medical School, The University of Texas Health Services Center, 5323 Harry Hines Boulevard, Dallas, Texas 75235.

**Adapted from a paper presented in Hot Springs, Arkansas, to the Texas Association for Radiation Research, November 4, 1972.

that the number of radiographic and fluoroscopic examinations is estimated to be increasing at a rate of approximately 1 to 4% per year, and that the number of patient doses of radionuclides used in nuclear medicine is increasing by approximately 20% annually. These represent significant increases in population exposure.

What exposure levels are we talking about with respect to *in utero* diagnostic radiation? In Table II are given estimated *average* fetal

TABLE II

Estimated Mean Fetal Gonad Dose
Per Examination, U. S., 1970*

Type of Examination	mrad per Exam
Upper Gastrointestinal Series	
Radiographic	483
Fluoroscopic	170
Barium Enema	
Radiographic	1,140
Fluoroscopic	444
Cholecystography or Cholangiogram	118
Intravenous or Retrograde Pyelogram	467
Abdomen, KUB, Flat Plate	153
Lumbar Spine	658
Pelvis	353
Hip	206

*From an oral presentation: "Preliminary Dose Estimates From the U. S. Public Health Service 1970 X-ray Exposure Study" given by a panel (Reynold Brown, R. Fuchsberg and J. N. Gitlin) at the annual meeting of the American College of Radiology, April, 1972. The complete study will be published by the U. S. Public Health Service.

gonadal doses from various abdominal diagnostic x-ray procedures in the U. S. These doses should not be viewed as applicable to every fetus — they will vary considerably with the machine used, the number of examinations performed, the amount of filtration and collimation, number of films, time of fluoroscopy, etc. They can not, therefore, be used to calculate doses in individual cases, but they do serve to give us some idea of the *relative* amounts of radiation exposure of a fetus from the different types of abdominal examinations.*

*It might be helpful to note that a PA chest film of an adult results on the average in a skin dose of about 50 millirads or 0.050 rad.

Table III shows the uptake of radioactive mercury by a human fetus. Note that the total dose to the embryo is in the range of 10 to 12 rads. The uptake by fetuses of the more commonly used radionuclide I^{131} has been studied in women whose pregnancies had to be terminated for medical reasons (Czerniak, et al., 1969). The fetus concentrates I^{131} in certain organs: thyroid, kidney, urinary bladder and ovaries. A 1.5 times greater concentration is found in fetal than in maternal blood. Data for embryos is not available, but there is reason to believe that I^{131} reaches the embryo.

TABLE III

Uptake of Hg^{197} by a 25 cm (crown to rump) fetus twenty-four hours after mother, scheduled for therapeutic abortion, was given 200 μCi of Hg^{197} chlormerodrin intravenously. From Sy, et al., Radiation Dose in a Human Fetus Following Use of ^{197}Hg . Radiology 103:139 (1972).

Organ	Whole Organ Weight (g)	% $^{197}Hg/g$ ($\times 10^{-4}$)	Calculated Absorbed Dose to Fetus (rads)
Heart	4.6	7.3	1.2
Lung	7.3	11.9	3.7
Liver	18.0	19.5	6.1
Kidney	4.2	40.9	1.2
Maternal uterine	----	8.5	---
Placenta	----	25.2	---
Umbilical cord	----	9.6	---

In some of the cases involving diagnostic x-ray exposure of an unsuspected conceptus which have been brought to my attention, it has been possible to obtain a fairly good estimate of the embryo-absorbed dose. I have been surprised at the number who have received a dose close to 10 rads. Please keep in mind that an abdominal x-ray examination of the mother that includes the uterus is *whole body* irradiation of the embryo or fetus. Whole body irradiation of any organism at any dose level is potentially more harmful than partial-body irradiation.

What possible embryo or fetal effects are we talking about after diagnostic x-ray exposure, i.e., after doses of 10 rads or less? They are developmental effects, gene or chromosome mutations, central nervous system (CNS) effects, and late effects such as postnatal neoplasia.

DEVELOPMENTAL EFFECTS

The effect which usually concerns most phy-

sicians and patients after fetal irradiation is a possible developmental anomaly. This type of effect is caused by a disturbance in growth during organogenesis such that an organ or part of an organ will be absent, hypoplastic or grossly distorted. Such an effect, which leads to a major congenital defect readily detectable *at birth*, probably results from the inhibition of cell division in some cells and the killing of other cells through the induction of lethal chromosome mutations.

The bulk of the experimental work on developmental effects of radiation has been done with mice and rats. The embryo has been found to be most sensitive to radiation during early gestation, a period comparable to the first six weeks of human gestation. It should be emphasized that during the first six weeks women often do not know they are pregnant.

The animal data (cf. Brent and Gorson, 1972; Rugh, 1973) can be briefly summarized and correlated, when possible, with human data as follows: (1) Irradiation during the preimplantation period or prior to organogenesis results in a high percentage of prenatal death (death may occur at any time during gestation). Those embryos which survive irradiation during this period usually reach term with no readily detectable malformations. In the human, this period is roughly comparable to the first two weeks of gestation.

(2) A developing embryo is most susceptible to radiation-induced malformations during the period of major organogenesis. In the mouse, definitive abnormalities are observed after 25 rads, the lowest dose studied thus far. Irradiation after major organogenesis may cause some morphological abnormalities, but they are usually less severe and may not be recognizable at birth. In the human, major organogenesis takes place during the 2nd to the 7th weeks of gestation. Ample data, accumulated before there was concern about radiation effects on the fetus, show that gross abnormalities of the types induced in mice can also be induced in the human embryo by doses received during radiation therapy to the mother for abdominal neoplasia.

(3) During major organogenesis there are critical periods of short duration when given organs (except the central nervous system) are most susceptible to radiation. For example,

oligodactylia in the mouse is most easily induced by irradiation at the time the limb buds begin to grow at 10.5 days of gestation. Similar limb abnormalities have been observed in humans irradiated (during therapy of the mother) at 4-5 weeks of gestation; limb buds make their appearance in the human embryo at 32 days.

(4) Radiation-induced gross malformations do not necessarily result in spontaneous abortion. That this is so in the human is evidenced by the fact that several decades ago the medical profession abandoned radiation as an agent for inducing therapeutic abortion.

In summary, the observations on experimental animals lead us to expect few, if any, *major* malformations after exposure of the human embryo to 10 rads or less of radiation. Because, however, approximately 2 to 5% of newborns have some recognizable defect, it is always possible that an embryo exposed to diagnostic radiation will go to term and show a defect that had no etiological relation to the radiation. In any court case arising from such a situation, and there have been some, it would be difficult to prove that the abnormality had been caused by the radiation. On the other hand, it might be equally difficult to convince a jury that the defect was not caused by the radiation (Collins, 1973). This is one factor to be considered in determining whether to follow Hammer-Jacobsen's recommendation (1959) that fetal doses of 1 to 10 rads may indicate therapeutic abortion and that doses above 10 rads always indicate abortion.

If we expect to see few or no radiation-induced gross abnormalities at birth, why should we be concerned about exposure of the human embryo during early gestation to diagnostic x-rays? The answer is that the effects of low doses of radiation are likely to be subtle ones that may not be easily detected at birth or they may not manifest themselves until several months or years after birth. In fact, recessive gene mutations, induced in the germ tissue, may not be detectable for generations. Let us now turn to these subtle but important effects of low doses of radiation which are receiving increased medical and public attention.

MUTATION

A mutation can be defined as an unusual permanent change in the molecular structure of the genetic material, i.e., the DNA, or a change

in the amount of DNA. The former we usually refer to as a point or gene mutation and the latter as a chromosome mutation. Because DNA is a unique molecule in the cell, any change in it is more likely to have an effect on the cell than changes in other types of molecules which are very numerous, e.g., an enzyme.

Chromosome mutations are much easier to detect in man than are gene mutations and have been widely studied. We will, therefore, concentrate on chromosome mutations, keeping in mind that at low doses both types of mutations are probably produced in equal numbers.

A good many human abnormalities, physical and mental, are now known to be related to specific chromosome mutations. Our knowledge of such mutations was made possible in 1960 with the development of a method of analyzing the chromosomes of human peripheral lymphocytes. Briefly, the technique involves culturing a few drops of blood in medium containing phytohemagglutinin, an antigenic substance which causes the lymphocytes to undergo cell division. After three days, when a large number of lymphocytes are in division, colchicine is added to the medium for several hours to disrupt the metaphase spindle so that the chromosomes and the cell cannot divide. Thus, many cells are hung up at metaphase, the best stage for analyzing chromosomes. The cells are fixed and dropped onto slides so that the individual chromosomes in each cell spread out and can be easily distinguished as shown in Fig. 1. Fig. 2



Figure 1
Human chromosomes from an unirradiated peripheral lymphocyte prepared as described in the text.

is a karyotype of this cell prepared by cutting out the 46 individual chromosomes and arranging the pairs in order of decreasing size. The sex chromosomes appear at the bottom of the karyotype.

Recently a method has been developed for differentially staining specific segments or "bands" of chromosomes. Each pair of chromosomes has a characteristic banding pattern which distinguishes it from other chromosomes. This new method will enable us to detect small internal changes in chromosomes which cannot be

observed in the uniformly stained chromosomes shown in Fig. 2. It gives us a finer focus, so to speak, on radiation-induced chromosome mutations and promises an increased yield of information on the extent of chromosome mutations in the human population.

For our purposes let us limit discussion of chromosome mutations to terminal deletions. Although there are other types of chromosome mutations (cf. Gaulden, 1973), a terminal deletion is the simplest type; it is termed a 1-hit aberration because it can be induced by a single

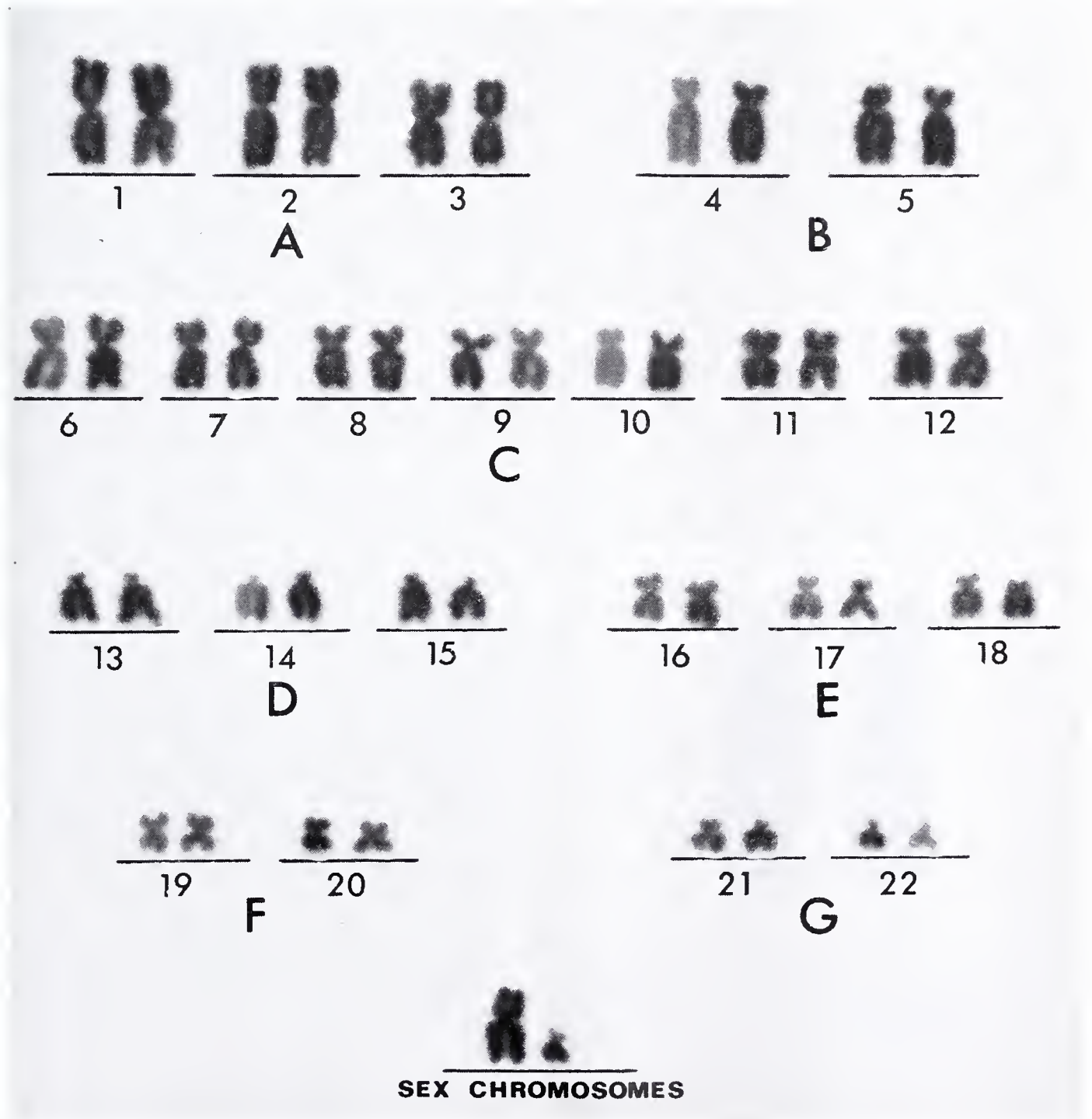


Figure 2

A karyotype of the human chromosomes shown in Figure 1. There are twenty-two pairs of autosomes (non-sex) and one pair of sex chromosomes. By international agreement the autosomes are arranged in seven groups (A-G) in order of decreasing size.

photon of x-rays. (There is some evidence that even so-called 2-hit aberrations, such as translocations, can actually be induced by 1 photon.) A terminal deletion results from a break in one arm of a chromosome with subsequent loss of the acentric piece (Fig. 3). Thus, a cell with such a mutation is deficient for the genes located in the acentric fragment. If deleterious recessive genes are in that portion of the unbroken chromosome which is homologous to the deletion (the acentric fragment), they will be hemizygous in all cells derived from the irradiated cell and will, therefore, have the potential for expression.

Our main concern with the effects of low doses of radiation on the human embryo centers about the fact that there is apparently no safe dose of radiation with respect to mutation induction. The number of simple mutations, such as chromosome deletions, increases linearly with dose, the lowest dose studied thus far in human cells *in vitro* being 5 rads and in experimental animals *in vivo* 1 rad. The data fall on a straight line which by extrapolation passes through the origin when correction is made for the spontaneous mutation frequency (Fig. 4). In other words, the linear dose-effect relation means *there is no threshold dose or no safe dose of radiation*. The number of mutations induced at very low doses will be small but the probabil-

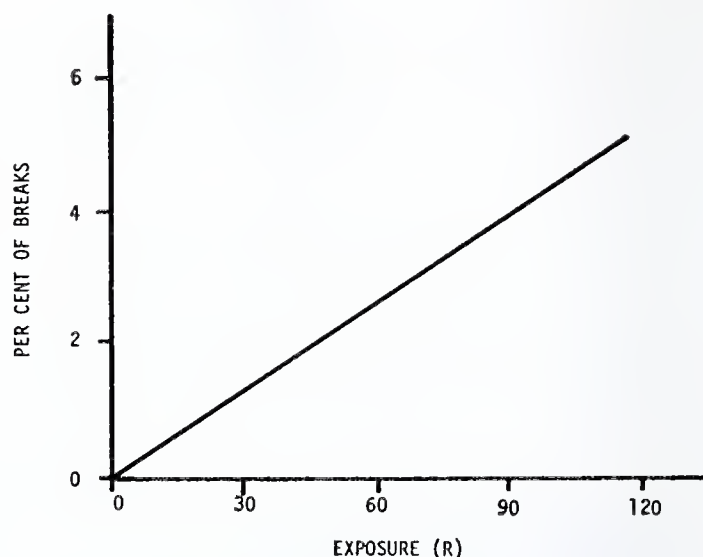


Figure 4

Dose-effect relation of single-hit chromosome mutations induced by x-rays. (From MEDICAL RADIATION BIOLOGY, ed. by G. V. Dalrymple, M. E. Gaudin, M. Kollmorgen and H. H. Vogel. W. B. Saunders Co., Philadelphia, Pa., 1973. p. 73. Reprinted with permission of W. B. Saunders Co.)

ity of induction will not be zero. Thus, we can safely assume that the doses of radiation used for diagnostic purposes are capable of inducing mutations.

Mutations can be induced not only in germ cells, with consequences to future generations, but also in somatic cells, with possible consequences to the irradiated individual. Both cell types occur, of course, in the embryo and fetus.

Germ cell mutations. A number of children have been reported who have inherited a single deletion-type chromosome from one parent, i.e., a mutation which was induced in a parental germ cell (the somatic cells of the parent did not have the mutation, so it must be limited to the germ tissue). None of these mutations has been traced to radiation exposure, in fact, little or no attempt has been made to do so, but such origin is well within the realm of possibility. Deletions in the B, C, D or E chromosome groups have been described but none in A or F chromosomes to date.

In the case of an inherited deletion in, for example, a number 18 chromosome pair, every cell in the child's body will contain one normal chromosome 18 and one chromosome 18 with a small portion missing (Parker, et al., 1973). Of special interest to our discussion is the fact that these children may appear normal at birth, but later show distinct abnormalities such as retarded psychomotor development, retarded

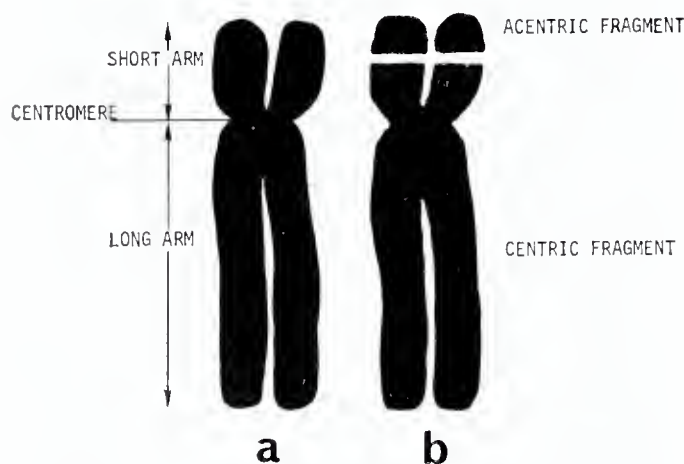


Figure 3

a. Diagram of a number 5 human metaphase chromosome (B group).

b. A break produced by x-rays in the short arm to give two acentric (no centromere) fragments and a centric fragment. The two halves of a metaphase chromosome, called the chromatids, are held together by the centromere which is identified by a constriction. The chromosome is attached to the metaphase spindle by the centromere so that at cell division one chromatid goes to one daughter cell and the other to the other daughter cell. Thus the centric fragment, called a deletion or mutated chromosome, is distributed normally at cell division, but the acentric fragment, having no attachment to the spindle, is unable to move and is stranded in the cytoplasm. The acentric fragment is resorbed and its contained genes are thereby lost to the daughter cell receiving the centric fragment.

growth and mental retardation. Other features, which are not always definitely recognized at birth, may become obvious later in development, e.g. hypertelorism, epicanthal folds, short and/or webbed neck, etc.

Thus, a single chromosome mutation induced in the germ tissue of a fetus (or an adult) by a low dose of radiation may be expressed in its immediate offspring.

Somatic cell mutations. In contrast to these children who have inherited a deletion, what abnormalities might be observed in children who were irradiated early in gestation? In other words, what would be the possible consequences of chromosome mutations induced in one or a few somatic cells of the embryo during the first 6 weeks of development?

On the basis of the "no safe dose" principle, we would expect that exposure of a group of cells, such as an embryo, to 10 R or less of x-rays may result in one mutation in one or a few cells. That chromosome mutations can indeed be induced in embryos by diagnostic radiology procedures is indicated by the data in Table IV. The number of cells affected would depend on both the dose of radiation (Fig. 4) and the age of the embryo, that is, the number of cells exposed (the larger the number of cells, the greater the probability of one being hit by a photon).

The ultimate effects of a mutation in a somatic cell will depend first on whether it is lethal or not. If a chromosome mutation is lethal to one of the few cells in a pre-implantation embryo, it might either lead to death of the whole embryo or result in no effect if the killed cell is replaced by surviving normal cells prior to the beginning of differentiation and organogenesis. These alternative consequences best explain the seemingly paradoxical observation on experimental mammals that irradiation of young conceptuses either causes prenatal death or results in offspring born with no developmental anomalies.

Viable chromosome mutations induced in an embryo lead to a condition known as *mosaicism*, i.e., some cells in one or more organs contain the mutation(s) and some are normal. The presence or absence of detectable effects of a mutation will depend on: (1) how vital to cell function are the affected genes, and (2) how many cells have the mutation in the individual

derived from the irradiated embryo. It is possible that a large number of cells could contain a given mutation originally induced in one cell of an embryo by a small amount of diagnostic radiation administered prior to or during the period of major organogenesis, the earlier the mutation occurs the larger the number of cells derived from the mutated one. Conversely, exposure of a fetus (four or more months of gestation) to a large dose of therapeutic radiation would result in a different kind of mosaicism in that a number of cells would be hit and would contain different types of chromosome mutations.

In the literature there are reports of mosaic children, some of whom are known to have been exposed to radiation *in utero*. Cases 4 and 5 in Table IV are examples. Case 4 was mosaic for three chromosome mutations which may have been induced by diagnostic x-rays in the first week of development. The child was evidently "normal" at birth but was brought to a physician when two years old because of abnormal mental and physical growth, at which time the somatic chromosome mutations were detected.

Case 5 is an example of a considerable amount of mosaicism induced by therapeutic radiation. It also demonstrates that a baby considered "normal" at birth will not necessarily develop normally. This child received a large amount of therapeutic radiation at the fifth to sixth months of gestation during treatment of the mother for carcinoma of the uterine cervix. At delivery by Caesarian section in the eighth month she was of normal weight and length for age and showed no congenital malformations. Subsequently, however, she proved to be far from normal: she sat at 9 months, stood at 12 months, walked at 21 months and did not begin to talk until 36 months. At age 4½ she had a mental development equivalent to that of a two year old. The peripheral lymphocyte chromosomes of this child were analyzed at various times during the first four years and the number of chromosome mutations remained at a relatively high level.

It could be argued that the chromosome mutations observed in the embryos and children cited in Table IV were not caused by the diagnostic radiation. The presence of 2-hit muta-

TABLE IV

From: MEDICAL RADIATION BIOLOGY, ed. by G. V. Dalrymple, M. E. Gaulden, M. Kollmorgen and H. H. Vogel, W. B. Saunders Co., Philadelphia, Pa., 1973, p. 81. (Reprinted courtesy of W. B. Saunders Co.)

CHROMOSOME MUTATION IN IRRADIATED FETUSES*

Case	Estimated Dose or Exposure	Type X-ray Examination	Fetal Age at Exposure	Age at Chromo- some Analysis	Tissue Studied	Chromo- some Mutations	Reference
1	0.19 rad	abdominal, hysterosal- pingograph	10, 11 wks.	12 wks.**	—	none	c
2	3.0 R	—	6 wks.	6 wks.**	skin, lung	trans- locations, monosomics, trisomics	d
3	3.9 rads	barium meal, enema	6 wks.	6 wks.**	chorionic fragments	deletions, dicentrics	c
4	—	“radio- pelvim- etry”	1 wk.	25 mos.	lympho- cytes, fibro- blasts	mosaic for 1-3 markers (extra)	b
5	—	radi- ation therapy	20-30 wks.	1, 2, 3, 4 years	lympho- cytes	all types	a

*References: a) Kucerova, M.: Long-term Cytogenetic and Clinical Control of a Child Following Intrauterine Irradiation. *Acta Radiol. [Ther.]* (Stockholm), 9:353-361, 1970.
b) Lejeune, L., et al.: Mosaïque Chromosomique, probablement Radio-induite in: utero. *C. R. Acad. Sci. [D.]* (Paris), 259:485-488, 1964.
c) Sato, H.: Chromosomes of Irradiated Embryos. *Lancet*, 11:551, 1966.
d) Thiede, H. A., and Salm, S. B.: Chromosome Studies of Human Spontaneous Abortions. *Amer. J. Obstet. Gynec.*, 90:205-215, 1964.

**Induced abortions.

tions (translocations, dicentrics) tends to counter this position, because they are usually not found in significant numbers in the absence of radiation. There is little doubt that the mutations and the mental-motor abnormalities in Case 5 were induced by the therapeutic radiation.

The number of reports of children with varying degrees of mosaicism for chromosome mutations of undetermined origin is increasing. We have observed some at Parkland Memorial Hospital in Dallas. The disturbing aspect is that these children often appear normal at birth but later exhibit physical and mental abnormalities. As pointed out above, this is also true for some children who inherit a small chromosome mutation, so the mosaicism is most probably a cause of the abnormalities. We have obtained some preliminary data in our laboratory supporting the idea that the presence or absence of a detectable physical or mental defect

in mosaic individuals is related to the number of cells containing chromosome mutations.

Thus, the answer to the question posed at the beginning of this section is that somatic cell mosaicism for one or more chromosome mutations is a distinct possible effect of diagnostic radiation exposure of an embryo, and mosaicism may result in profound effects which are not detectable at birth but which become evident during postnatal development.

CNS EFFECTS

Unlike all the other developing organs, the central nervous system is unique in being very susceptible to radiation-induced damage *all the way through gestation*. This is undoubtedly related to the facts that (1) neuroblasts in all organisms are among the most sensitive cells to radiation, and (2) neuroblasts are present throughout the body up to birth (in the human

they are present in the brain for two years after birth).

CNS abnormalities are the most frequently observed radiation effect in children exposed to therapy doses at varying times in gestation. A significant number of children exposed during the 6th to 27th weeks of gestation to as little as 50 R of atomic bomb radiations were mentally retarded. A dose of x-rays as low as 25 rads is lethal to some of the neuroblasts in a mouse embryo, and 10 rads can cause considerable disorganization of the neurons in the cerebral cortex (effects of lower doses have not been studied). The offspring of rats exposed to 1R/day for the first 20 days of gestation show slower adaptation to test chambers than do unirradiated animals.

These and other data suggest that doses of x-rays in the diagnostic range may induce in the embryo and fetus CNS effects which would probably be of a subtle if not undetectable nature. Mosaicism for radiation-induced mutations in neuroblasts could result in such effects.

In man the number of mental disorders known to be caused by single genes is slowly increasing. It is of interest to our discussion to note that not all of them are expressed early in life; for example, individuals who inherit Huntington's chorea, caused by a dominant gene, do not usually exhibit abnormalities until after 30 years of age. Many of the characters determined by the CNS appear to be controlled by more than a single gene, intelligence being one. It also appears certain that the genes which control the total motor-intelligence-behavior pattern of an individual are many and are distributed among most if not all of the 23 pairs of chromosomes. This explains why most inherited chromosome mutations, irrespective of the chromosome involved, usually cause impairment of cognitive ability. It also emphasizes why we are concerned about radiation-induced chromosome mutation mosaicism in neuroblasts, a concern that finds support in Case 4 of Table IV.

Much more data are obviously needed. Subtle radiation-induced changes in CNS function, such as cognitive ability, will be difficult if not impossible to determine, but we must be aware of the possibility.

LATE EFFECTS

In 1958 Stewart and co-workers (cf. Stewart, 1971) jolted the medical world by reporting that children who had been exposed to diagnostic x-rays *in utero* had a $1.5 \times$ greater risk of developing leukemia than did children who had not been irradiated *in utero*. In 1962 MacMahon extended this finding to a $1.4 \times$ increased risk not only of leukemia but of all types of neoplasia. Negative results have been reported by others, but in every case the population examined was too small to obtain statistically reliable data. The very large populations sampled by Stewart and MacMahon give one confidence in their conclusions.

Stewart has recently reported that the increased risk is roughly proportional to the number of x-ray films made. This linear relation suggests, but certainly does not prove, radiation-induced somatic mutation as a cause of the increased tumor incidence. This is not a far-fetched suggestion in view of the fact that certain types of tumors appear to be related to single gene mutations; the gene for retinoblastoma has been tentatively located on a D chromosome (Wilson, et al., 1973).

A few studies have suggested that radiation is not the only factor responsible for the increased tumor incidence after *in utero* exposure, but x-rays certainly seem to be one factor. Pending further studies to define all parameters, we must take cognizance of late developing tumors and leukemia as possible consequences of embryonic and fetal exposure to diagnostic x-rays.

CONCLUSIONS

There is an increasing number of reports in the news media about the "dangers" of medical radiation, especially to the embryo, which serve to make patients uneasy about x-ray examinations. This unease is in some cases leading to legal action against physicians. By extrapolating from data on experimental animals and human cells *in vitro* to the data available on human cells *in vivo*, we can not escape the conclusion that there is no absolutely safe dose of radiation, and, therefore, that the low diagnostic doses administered to human embryos and fetuses are capable of causing effects which may not be detectable at birth. Unquestionably, more data are needed to determine the level of risk, but one point is already obvious: no longer can we

be intellectually or morally satisfied with using an irradiated infant's "normal" condition at birth as the end point of our investigation of low dose effects. Those of us associated with or in the medical profession must further re-orient our thinking to accept the distinct possibility of adverse effects of diagnostic radiation on the human embryo. Physicians must continue to seek constantly an acceptable balance between the benefits to be derived from a given x-ray exam and the potential harm to the unborn child.

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PANEL DISCUSSION

Dr. Dalrymple: This discussion follows in the same vein as Dr. Gaulden's paper. Namely, the problem of irradiation of women. To start the discussion I will present a situation we faced a few weeks ago.

A 30-year-old married Caucasian woman presented to a hospital emergency room with signs and symptoms compatible with acute gastroenteritis. Since she had recently been to Mexico, the presumptive diagnosis was reinforced. The attending physician ordered, initially, an acute abdomen radiographic series (PA chest, erect AP abdomen, and recumbent AP abdomen). A few days later the patient had a gall bladder series, a GI series and a Barium enema. Within three weeks of the radiographic studies, the patient discovered that she was pregnant. At the time of her X-ray studies, the embryo was of some 3-4 weeks gestation.

Mr. Vandergrift and I served as consultants to the hospital. He, together with the fluoroscopist, simulated all of the X-ray exposures (radiographs and fluoroscopy). The results of his measurements indicated the dose to the fetus to be 2-3 rads. These values agreed with data published in the literature (Ref. 1). I should add that the hospital in question practices the highest quality radiology. The equipment is modern, well calibrated, well maintained, and

operated by competent personnel. Under lesser circumstances, the dose to the maternal uterus would certainly exceed the 2-3 rads found in this instance.

I will now start the discussion by posing a question to Dr. Gaulden. What is the importance of a dose of 2-3 rads to a 3-week fetus?

Dr. Gaulden: This time in gestation is the period of greatest sensitivity to the effects of radiation upon development. I personally feel, however, that in view of all the data available, the probability is very low that a dose of two or three rads will cause a developmental effect which would be obvious at birth. There is the other possibility, of course, that chromosomal mutations will be induced by that much radiation and may cause the mosaic phenomenon I described. I think this is a distinct possibility. If the doubling dose of radiation for the induction of chromosomal mutation is indeed one rad, as has been proposed, two-three rads will double or triple the spontaneous mutation frequency. What the consequences for future health of the child will be we just cannot say, but we can say that the probability of an effect will not be zero.

Dr. Dalrymple: The question has come up that, given there are many factors that interact,

would you recommend a therapeutic abortion on the basis of the history I have given you?

Dr. Gaulden: The answer is not a simple yes or no. Each case must be considered individually. When an embryo gets one rad or more during the first crucial six weeks, I advise clinicians to sit down with the patient and her husband and discuss the fact that there is a possibility, even though a small probability, that there may be some effect of the radiation. The various possible effects should be discussed, so that the potential parents can weigh all factors in reaching a decision. One fact which must be stressed is that in the absence of prenatal irradiation, approximately 2-3% of liveborn infants have some detectable defect at birth. On the basis of his experience, a Dane, Hammer-Jacobsen, proposed in 1959 that: "Foetal doses between one R and about ten R indicate therapeutic abortion only in the presence of additional indications. Foetal doses above about 10R presumably always indicate abortion." He did not specify what the "additional indications" were. I have further arbitrarily divided this so-called "Danish Rule" as follows. After embryonic doses of 1 to 5 rads, the potential parents should be told the various possible effects of very low doses of radiation and their questions answered thoughtfully and empathetically, but the decision to abort or not should be theirs alone. At doses between 5 and 10 rads, the same procedure should be used and the patients advised to give serious consideration to abortion. At doses of 10 rads or more, I advise abortion with no equivocation. I think most physicians will find that patients appreciate their interest and concern and will understand that a definite risk value can not be given them.

We've come up against a number of cases like the one you described. We have had some parents who have said that even if there is the remotest possibility their child would have any kind of abnormality, they would rather abort and start all over again. I have found this to be particularly true of young parents and also some in the age range of your patient (30). We have others, especially women of older age, who want the child very, very badly and they say, "We would take a fifty percent risk."

Let's take a minute to look at the following situation. I've had women come to me and say,

"What is the possibility that my baby is abnormal because of all that radiation it got when I was pregnant?" And, I would say it would be exceedingly difficult to prove that it was caused by the radiation because 2-3 percent of all live births have some abnormality whether they have had any radiation or not. I have had several of them shoot back at me, "But it would be equally difficult to prove that it was not caused by the radiation." That is a big dilemma, which can best be avoided by using an elective scheduling method for x-ray exams of women of reproductive age to prevent irradiation of unsuspected conceptuses. We are using such a method at Parkland Memorial Hospital in Dallas similar to the one being used at the University of Arkansas Medical Center.

Dr. Dalrymple: Would I be correct in assuming that a probability of having a child with a visible detectable abnormality at birth induced by two to three rads would be extremely low?

Dr. Gaulden: Yes. I think abnormalities that may show up may not become evident until the child starts developing—in a year or two or more.

Dr. Dalrymple: Let me bring Dr. Newbern into this since he and I occasionally have to face this kind of problem. Who bears the medical-legal-responsibility for medical radiography? The requesting physician must consider two broad areas—particularly if he is working in an emergency room. First, he has the clinical considerations—what is best to do for the patient. Second, and of increasing importance lately, are medical-legal implications. Review of the records of any emergency room will indicate a sizable percentage of X-ray procedures done primarily for medical-legal reasons.

The patient we have presented points out other areas of responsibility. One would surmise that several individuals would be involved in the responsibility for irradiation of the unborn fetus. The referring physician, the radiologist performing the fluoroscopy and supervising the radiography, and the technologist who actually performs the studies. I will now ask Dr. Newbern to give us his views on this problem.

Dr. Newbern: I agree. We cannot delegate this responsibility. It is such a big problem that it is hard to know where to begin. Certainly,

many people come to the emergency room and say, "Johnny bumped his head and I want an X-ray." You tell a patient, "Well, I do not believe there is anything wrong. It would be best not to X-ray the child now. Watch him carefully and if he develops any kind of clinical problem, then we can always X-ray him later." What will happen, however, is that the patient will leave the emergency room and go to another hospital for an X-ray. This is an educational problem and I do not know how to get around it. I would estimate that thirty to forty percent of all the X-rays ordered in the emergency room are purely defensive radiology. The films are made for bumps on the head, minor trauma to the rib-cage, etc.

We are having some difficulty just getting clear cut information on the X-ray requisitions about potential or actual pregnancy of women patients. Obtaining information by direct questioning can also be difficult. For example, consider a thirteen-year-old girl in the emergency room with a history of nausea and vomiting and some vague pain. The referring physician requests a GI work-up. This means a barium meal, barium enema, etc. When you ask the mother if this little girl could be pregnant, the mother becomes incensed. Further questions about the date of the girl's last menstrual period may cause the mother to become so angry that she will change physicians. Consequently, the physician must use considerable tact to obtain a history relative to potential pregnancy. This is not a medical problem but it is a social problem. We do try to keep good records on everybody now — much better than we used to. Exact number of films, exact time of fluoroscopy, which machine and which technical factor. We can measure this better now than we used to. We think we do a pretty good job of this but it does not eliminate the problem we are talking about.

Dr. Gaulden: I would like to confirm what you said. This has been a real problem with us at Parkland. When we started the elective scheduling method we came up against the same problem with the very young girls. We decided it would be simpler to limit this questioning to girls fifteen and older, and just not bring up the subject with younger ones. The clinical staff, particularly the obstetricians, said: "You can't do that. You have got to lower the age limit

because we have over a hundred births a year to mothers under age 15." So finally what we decided to do was to ask the girls, not the mothers, if they had started menstruating, and if so, when was their last menstrual period. That cuts out some of the problem: you don't have to go any further with those who are in the safe period. If they are not in the safe period, then I agree with you, this can get to be a sticky problem, and we have had some very incensed parents, but we have also had a few cases in which sure enough that girl was pregnant.

Ronald M. Humphrey, Ph.D. (M.D. Anderson Hospital): Coming back to this case, the problem that Dr. Dalrymple pointed out during the presentation, let's assume that the patient knew that she was pregnant, maybe just found out, so that she is in the very early stages. What would be the recommendation in this situation?

Dr. Dalrymple: If compatible with good medical care, you would avoid radiography. If the patient's condition warranted, however, I would not hesitate to perform all radiologic studies indicated.

Dr. Gaulden: I have lost count of the number of cases referred to me from outside the Medical School in which a woman's initial complaint is some nausea or upper abdominal or back pain. A whole series of X-rays were ordered on her. These women are not critically ill (as the girl in the case we have been discussing). It turns out that all that was wrong was that they were pregnant. I think Dr. Newbern has put his finger right on the problem, and that is the matter of education, not only of the public but of the physicians, because many physicians are just not aware of diagnostic radiation hazards to the embryo, and women's magazines are alerting women to possible hazards.

Dr. Dalrymple: At the University of Arkansas Medical Center we are very concerned about (1) identifying the potentially pregnant patient and (2) avoiding any radiation exposure to these patients unless a real emergency dictates otherwise. So far, we have had excellent and enthusiastic cooperation from all individuals concerned.¹

The requisition form for radiographic procedures contains a blank for the requesting phy-

¹The details are published in *Medical Radiation Biology*, G. V. Dalrymple, M. E. Gaulden, G. M. Kollmorgen, and H. H. Vogel, Jr., editors, W. B. Saunders & Co., 1973.

sician to certify that the patient is not pregnant, or if she is potentially pregnant, that the examination is indicated. In addition, the patients are questioned by members of the technology staff before those studies which require pelvic irradiation (barium enema, pelvis films, etc.).

In Nuclear Medicine¹ we have the patient fill out a questionnaire which provides information about (1) sterilization operations, (2) current contraceptive used, and (3) date of last menstrual period. We use the following criteria for "elective booking." If the patient is more than 13 days from the beginning of menstrual flow, the examination is deferred until the next onset of menses. When the reasons are explained, the patients accept the delay very well. They seem to be pleased that the medical staff has an interest in the unborn child.

Next, I am going to call upon Mr. Wilson who represents a State level regulatory agency. From statements in the lay press, many people look to agencies such as the State Health Department and the AEC for a leadership role in the problem of lowering the radiation burden to the population. To anticipate, I believe that Mr. Wilson is going to tell us why this is *not* the role of his group.

Mr. Wilson: No, as a matter of fact, it isn't. Our regulations and our responsibility only come into play after the judgment is made to make the radiograph or to use the fluoroscope. Contrary to what the public may think, we have nothing to do with this judgment area. However, I believe that in the future we may very well get into this area. There seems to be a national trend, not a local trend, that regula-

tory agencies become involved in the judgment area much closer than we are involved at present. Very likely, the future will see specific regulations of the judgment area by organized regulation agencies.

Dr. Dalrymple: I will now yield the floor to Mr. Vandergrift. As Radiation Safety Officer of the University of Arkansas Medical Center, he represents a "regulatory" agency from within.

Mr. Vandergrift: I am sort of in the same boat with Mr. Wilson to the extent that my own personal authority probably deals as much or more with occupational exposures than it does with clinical exposures. However, Mr. Wilson indicated, we are getting more and more over into the clinical aspects. Somewhat by default, maybe. We have dealt with the particular problem, too.

Dr. Dalrymple: If I may, then, I will summarize the statements made by Mr. Wilson and Mr. Vandergrift. Neither "in house" or distant (such as city, state, and federal) regulatory agencies are involved in the *decision* to radiograph a given patient, how many films are to be made, etc. This is a medical judgment which is made by a physician. The regulatory agencies are concerned, primarily, with the performance of the personnel and equipment once the decision to radiograph has been made. Consequently, the responsibility for keeping the medical-based radiation burden at a minimum must originate with the physicians who (1) order and (2) perform the studies.

Reference 1

Antoku, S., and Russell, W. J.: Dose to Active Bone Marrow, Gonads and Skin From Roentgenography and Fluoroscopy, *Radiology*, Vol. 101, December, 1971.



Physicians' and Surgeons' Professional Liability: Quicksand Controversy**

Mr. John A. Roeder*

Some of you might wonder how I arrived at the title "Physicians' and Surgeons' Professional Liability: Quicksand Controversy." It was arrived at as a result of having to present this title back in November, nearly five months ago. When I wrote to Dr. Jansen, the Convention General Chairman, to present him with a specific title, I told him then that I wasn't sure what I meant by the title, except that the subject is indeed controversial and the more I wrestled with the problem, the more I got a sinking feeling. Today, five months later, the subject is still controversial and I still find myself somewhat subject to that sinking feeling. Between November and April, I've been like a minister trying to fit the content of his sermon to the title he chose at some previous time. I, like some of them I'm sure, began to wonder if I wasn't trying to match conservative subject matter with a liberal title.

I've finally concluded that the title doesn't really matter as much as the content anyway. What is important is responding to the privilege of being with you this afternoon, by providing you with what I hope you will find to be some interesting and useful information about your professional liability insurance and the problem of malpractice.

When you read the list of *really* distinguished guest speakers addressing this convention, you have to ask the question of why am I here? Few of you know me or have ever even heard of me. I'd be surprised, however, if you haven't heard the name of the company I represent, The St. Paul. Presently in Arkansas we insure over 975 individual physicians and surgeons and all of the interns and residents at the University

Medical Center. Our involvement in providing professional liability for doctors in this State is significant and my job is to supervise the administration of this insurance program for our Company. My job could not be accomplished without the cooperation of the Arkansas Medical Society.

Our Company's relationship with the Arkansas Medical Society began in 1962. Our proposal leading to your Society's endorsement included the availability of one of the broadest, if not the broadest, Physicians' and Surgeons' Professional Liability Policies, a contract that was first introduced in 1935. We feel that today our policy still has that quality. In 1962, we told this Society that we wanted to continue to market our product through local independent insurance agents in your own communities. We feel the same way today. Your right to select insurance representation in the community where you practice, we believe, best serves the interests of Society members. It allows you to receive insurance service from an agent of your choosing for any and all lines of insurance you may find necessary to purchase.

Since 1962, we have maintained a continuous working relationship with the Society through the Office of the Executive Vice President and the Chairman of the Insurance Committee. Since coming to Arkansas in 1970, I have personally experienced an excellent working relationship with Mr. Paul Schaefer and Dr. Harry Hayes. I can assure you that both of these gentlemen are serving the interests of the Society well when it comes to insurance matters.

I have introduced the word "controversy" into this presentation; why is there controversy? There is controversy because there is concern and discontent among doctors everywhere over

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increasing malpractice lawsuits against them and increasing premiums for the insurance that protects them against such suits. There is controversy because more than ever before in this country our legal system is the center stage for the drama of protecting consumer and public rights. There is controversy because insurance carriers are reacting to their concern for increasing malpractice claims by increasing rates or withdrawing from the market. There is controversy because each independent party to all of this views each of the others, separately or collectively, as an adversary. Each of us, doctor, insurance company, the patient public and their legal counsel, being a party to the controversy has a responsibility to contribute to the solution if one is ever to be found.

No one here knows better than you that the word malpractice is an ugly word. It has a ring of horror. It's a word that to the physician may mean a damaged reputation and practice. It means that a professional has made a mistake in the execution of his profession. The image of a professional is one of all-knowing, well educated, polished, fine tuned, honed or what have you, and mistakes are not contemplated to be part of this image.

The public image of a physician today is often cited as a factor contributing to the ever increasing number of malpractice claims. Our transient society has broken down the once close patient/doctor relationship. Doctors today are viewed as super-successful with above average incomes and all the material benefits of their success. You are operating in a world viewed as being full of wonder drugs and improved medical techniques, capable of the extension and restoration of life itself. It is not unreasonable to expect the general public and their legal representatives to view the physician as a likely source of compensation for a professional error and/or patient disappointment.

The public image of the physician is aired every week on television by such programs as *Medical Center*, *Marcus Welby, M.D.*, *As the World Turns* and even *Hee Haw*. These programs are full of movieland glory, distortion and even mockery.

How many of you had an opportunity as I did a month or two ago to see the NBC documentary, "*Bellevue*"? This program was a mov-

ing real-life drama about the interns and residents of that great medical institution. Those of you who may have trained there may not have appreciated it in the same way I did. But here was a public airing of the life of a physician that I feel erases some of the distortion so common in the doctor's public image today. It relates so well the sincere dedication it takes to endure those grueling 36 hour shifts. It shows how one young surgeon can rejuvenate his energy and senses repeatedly during that 36 hour period to respond with all the necessary expertise to handle the flood of trauma cases wheeled into that hospital off the streets of New York. It showed so movingly the anguish of failing to save a life. More of the public should see the blood, sweat and tears of "*Bellevue*".

Now let's look more specifically at insurance and how it relates to the overall problem. Insurance is designed to operate within the bounds set by our legal system. Professional Liability Insurance is supposed to pay on your behalf because of some act of negligence. But when it comes to doctors, our legal system has imposed the extra burden of two legal doctrines. One is "*res ipsa loquitur*", "the thing speaks for itself". Not very long ago the burden of proving negligence fell to the patient bringing suit.

Under the doctrine of *res ipsa loquitur* the burden of proof shifts to the physician and he must prove he's not negligent. The other doctrine is the "loaned servant" doctrine which shifts liability to doctors for acts of others. Heads of departments of surgery may be held liable for operating room procedures and not even be in the room. A more realistic example is the matter of the sponge count. It is a procedure which is performed by other operating room personnel but for which doctors are frequently held responsible when mistakes are made.

The introduction of the medical assistant or para medic has already caused some controversy in Arkansas. Aside from the political turmoil that has been created, one thing is quite clear: the physician under whose guidance these people work is also going to assume the liability for their professional acts. However, I do not consider this to be a situation more unusual than the liability that now exists for the acts of employed physicians, partners, other members of

a professional corporation or any other professional employee. This exposure is understood to exist and coverage is normally provided by your professional liability insurance. Under The St. Paul Contract, coverage for this contingent liability is always provided unless because of unusual circumstances the Contract is specifically modified to avoid it.

While we're talking about employees, we should attempt to clear up a common misconception. Your professional liability policy protects you for the acts of others for whom you may be responsible, such as an employee, but no coverage exists under your policy to protect that individual. Your nurses and technicians need their own professional liability policies to protect them as individuals. Coverage for these people is readily available from the same source through which most of you have your coverage.

The impact of medical malpractice is being felt everywhere. All of you, I'm sure, are familiar with the situation in California and New York. Rates in those states are three to four times higher than the national average which is approximately 14% higher than Arkansas rates in all classes. A recent change in California law requires that a \$2,500 bond be posted before a malpractice suit can be filed. If the plaintiff loses, the \$2,500 is yielded to the defendant physician. This new law must now stand the challenge of constitutionality, but if it meets the challenge, this law should lead to an improvement of the malpractice situation in California.

On the national level, we have seen two major examinations of the malpractice scene in the past five years. One completed in 1970 was a part of a report on health and health care problems conducted by the Senate Subcommittee on Executive Reorganization. Senator Ribicoff's Committee drew the following conclusions, some of which I've already made reference to:

1. The number of malpractice claims and the resulting judgments are rising sharply.
2. Most malpractice suits are the result of some injury suffered during treatment or surgery.
3. The publicity given to higher judgments, often based on new legal precedents, is leading to increased litigation.
4. The already higher judgments and settlements are being directly reflected in in-

creased rates for malpractice insurance and that these costs, in the form of higher charges, are being passed on to patients, the health insurance companies and federally sponsored health care plans.

5. Physicians are being forced to practice defensive medicine, viewing each patient as a potential malpractice claimant.
6. The bulk of the total cost of malpractice suits to the insurance companies goes to lawyers.
7. No effective solution has been offered to halt the rapidly increasing frequency of malpractice suits.

A more recent study was conducted by HEW's Medical Malpractice Commission. A vice president of The St. Paul served as a member of this commission. The report of this commission is expected to be released this month. Reportedly, it is made up of hundreds of recommendations which will require careful analysis and consideration in the months to come.

There are two key elements of this report. One is an echoing of a previously stated fact that "patient injuries, real or imagined, are prime factors in the malpractice problem." The second is a recommendation that a non-governmental, non-profit organization be established to be a nationwide focal point for malpractice research information, education and prevention activities. This organization, the commission suggests, should represent those parties I referred to earlier as being part of this controversy and therefore the logical parties to the solution; the doctor, the patient public, the legal representative and the insurance companies.

The commission will make other broad based program recommendations involving: injury prevention programs, standardization of statistical data reporting systems, test projects of alternative medical injury compensation systems (you've heard, I'm sure, of the suggestion for no-fault malpractice), improved communications between insurance carriers and physicians on loss prevention and claims settlement practices, a study of the problems of overlapping health insurance benefits in an effort to better allocate resources to improve the quality of coverage for all, alternatives to rate making and providing malpractice coverage and much, much more. This commission report appears to contain posi-

tive recommendations for programs that will answer to the malpractice problem.

Sometimes we feel that Arkansas is still a sanctuary sheltering us from the growing threat of malpractice and that which takes place nationally is not a factor here. This is far from the truth. The same trends we point to nationally are equally true here, but in some cases the full impact has not yet been felt.

Arkansas has a growing transient population whose hometown patient/doctor relationship has been severed. They now fall into that group who face a more impersonal, purely business relationship with a new physician.

The number of malpractice claims being reported to The St. Paul is increasing yearly. Four years ago, in 1969, seven claims were reported. In 1970, 15 claims were reported; double from the previous year. In 1971, 31 claims were reported, double again from the previous year. In 1972, 35 claims were reported, not many more than 1971, but, an increase none-the-less. So far in 1973, we've had seven new claims reported, five more than for the same time last year.

We are experiencing the same trend of increasing settlement demands when suits are filed.

Arkansas is not sheltered from the publicity given to jumbo awards and settlements made on malpractice claims across the country. In this respect, we feel we still have the advantage of good juries, which, for as long as it holds out, is a tribute to the integrity and down to earth goodness of Arkansas people.

A phenomenon of rate making which is as true in Arkansas as anywhere else is what we refer to as the "long tail" of malpractice claims. This tail develops because of the often extensive lapsed time between the actual occurrence and the time it is reported and then again to the time the claim is settled. As an example, we did a study of the effect of this tail using the period of time from the inception of the program, 1962, through December 31, 1967. Measured as of December 31, 1967, we showed earned premiums (money that belongs to the company) of \$193,721 with paid and outstanding losses of \$51,497. That looks pretty good because the ratio of losses to earned premium is 27%. However, we examined that same period from the inception of the program to December 31, 1967, on De-

cember 31, 1972. Here's what we found. Our total paid loss was \$231,173 and the ratio of losses to earned premium was 119%.

Looking at the 35 claims reported in 1972, nine were for occurrences in 1970, seven of the 35 happened in 1971 and nineteen in 1972.

Not only is it difficult to predict losses, but it also takes several years before we really know what our true experience has been.

Who has these losses? What kind of doctor is most susceptible to a claim? Using the same 35 claims reported last year, the breakdown by class of physician looks like this:

7	Class I	GP's—no surgery
2	Class II	GP's—minor surgery, some obstetrics
13	Class III	GP's—major surgery— Ophthalmologists
6	Class IV	General Surgeon, Cardiac Surgeons, Urologists
7	Class V	OB/GYN, Plastic Surgeons, Neurosurgeons and Anesthesiologists

Incidentally, the 1971 breakdown by class looks much the same. The 31 claims reported then break down as follows:

Class I	5
Class II	2
Class III	14
Class IV	2
Class V	8

It's interesting too to look at what kinds of occurrences lead to claims. Using the same 35 claims reported in 1972; here are some examples:

Class I doctors presented claims involving improper or incomplete diagnostic procedures; injury during examination; improper or incomplete instructions to hospitals; drug reaction and two patient deaths.

Class II doctors had only two claims, one for incorrect blood typing and one for an allergic reaction to drugs.

Class III doctors presented us with claims involving complications after treatment, improper or inadequate treatment, patient deaths, 6 of them; nerve damage and improper diagnosis.

Class IV claims included cases of improper treatment resulting in loss of limb, two deaths; deafness resulting from improper drug administration and surgical error.

Class V claims included broken teeth from patients biting down on air-ways; surgical errors; patient death, instruments left in patients and injury to a child during child birth.

Obviously, malpractice claims can occur from almost any procedure. Of the 35 claims reported in 1972, 10 involved patient deaths. Not all of those will prove to be valid, but you get a pretty good idea of what to expect these days when you have the misfortune of losing a patient.

I cannot conclude my presentation to you today by telling you that I have a solution to this problem. After all, the public views *you* as the miracle workers, and, well, you know what the public thinks of insurance companies. But there are things all of us can do and must do to help end this problem.

At The St. Paul we are presently compiling a library of malpractice loss prevention materials. How these materials will be disseminated and used, I don't know yet; but you can be certain your Society will be advised of their availability.

I'm sure our company will be involved in some of the projects being recommended by the Commission on Medical Malpractice. We will continue our efforts to keep the Society advised on the experience we are having in Arkansas, including types of losses.

As doctors, you can help too by immediately reporting any real or potential claim situations

to your insurance agent so he can advise us. Give your complete cooperation to the attorney who'll represent you. Don't over-react by immediately filing countersuit and possibly jeopardizing your defense. Be certain that your close working associates and employees have the appropriate individual coverage so that you won't fall subject to any more liability than you normally would have; in other words, don't become someone else's scapegoat. When you buy insurance, whether from The St. Paul or another carrier, make sure you buy your professional liability and premises liability coverage from the same company. That way you'll avoid the conflict of two companies battling between themselves about who pays. There are many situations where the final decision between what is a professional liability claim or a premises liability claim may only come from the courts.

On our table at our booth we have a pamphlet called "Tips to Prevent Medical Malpractice Claims". We urge you to pick one up, read it and circulate it in your office, clinic or hospital.

Let me assure you that in this malpractice controversy, you have in The St. Paul not an adversary, but a partner. We're proud of our association with the Society; we are interested in you and your problems and we are going to make every effort to assist you in brightening the picture of the physician and malpractice.





Current Horizons in Cancer Management**

James D. Hardy, M.D.*

Fresh breezes are blowing in the field of cancer management. The 1940's were characterized as the decade in which isotopes and other substances were used for measurements which ultimately improved the quality of patient management. The 1950's were the decade in which open heart surgery was developed, and the 1960's were a decade for organ transplantation. The 1970's may be looked upon as the decade in which our views and objectives turned more forcefully toward the conquest of cancer. Many of the ideas which I shall touch upon represent as yet unsolved problems, but ideas are the coin of the realm of progress.

Why Cancer Patients Die. When I was in medical school, I was fascinated by the fact that the many patients with cancer died without evidence of interference with any vital function such as the circulation, respiration, urine formation or alimentary tract function. At that time the cachexia of far advanced malignancy represented an enigma. In 1946, I proposed to Dr. I. S. Ravdin that I investigate whether the weight loss in cancer patients was due simply to reduced food intake or whether ingested food was poorly absorbed or used inefficiently. This led promptly to the need to be able to measure the body content of fat, water and protein. This involved many ramifications, including measurement of body fluid compartments with isotopes. For

without appropriate measurements it was not possible to determine whether weight gain represented merely water or whether tissue had also been fabricated. However, we and others eventually found that, in addition to reduced food intake in many patients because of anorexia, ingested nutrients were inefficiently utilized in many patients. Also, there were excessive protein losses through the kidney and the intestinal mucosa in others. Digestive processes were demonstrably impaired in many instances. Thus, some of the causes of the profound weight loss exhibited by many patients were identified.

Since these early findings, it has been documented that essentially every organ may be affected by a physically localized malignant tumor. For example, thymic tumors may produce myasthenia gravis, agammaglobulinemia, or a form of anemia that is due to agenesis of the red cells. Each of these may be corrected in some patients by removal of the thymic neoplasm. However, of all the tumors studied, the oat cell carcinoma of the lung is the most spectacular as regards the wide variety of metabolic effects that can result from the hormone-like substances which may be elaborated by the tumor. The changes in bones and joints are well known and need no elaboration. Another interesting change which may occur is that of gynecomastia, which appears to be associated with an increased elaboration of estrogens at least in some patients. Adrenocortical hyperfunction may be produced, due to the secretion of an ACTH-like substance by the

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lung carcinoma, and a parathormone-like substance may also be secreted which produces hypercalcemia. Hyponatremia may result from secretion of an anti-diuretic hormone by the tumor, or perhaps by an effect of the tumor upon the posterior pituitary. Still other effects include a striking type of cerebellar ataxia and peripheral neuropathy.

Tumors of the liver may be associated with polycythemia, hypoglycemia, fever, and in the rare patient a type of Cushing's syndrome. Retroperitoneal fibromas, either benign or malignant, may cause profound hypoglycemia, and some of these may secrete an insulin-like substance. The renal cell carcinoma is almost the equal of the lung carcinoma in its capacity to produce a variety of substances. For example, these tumors may produce hypercalcemia, peripheral neuropathy, polycythemia, and still other changes.

Thus, almost all malignant tumors have now been shown to produce definite biochemical changes in the body, and almost all organs have been shown to be affected in at least some respects by remote tumors. Therefore, it is no longer necessary to search for possible causes of the malignant cachexia which represented such a baffling condition 30 years ago: malignant cachexia is the net result of a host of biochemical changes, many of which have been identified already but most of which still remain to be elucidated.

Modern Diagnostic Procedures. The techniques available for the diagnosis of both the presence and the extent of tumor have been sharply upgraded in recent years. The fiberoptic bronchoscope, gastroscope, and colonoscope have all added significantly to the precision with which tumors of the lungs, stomach, and colon can be visualized and biopsied. Mediastinoscopy is also a useful advance, giving both the diagnosis of many tumors and also identifying whether or not there is a reasonable chance that resection of the lung or a portion thereof will be curative. The fiberoptic bronchoscope permits one to visualize not only the segmental bronchi but even their sub-branches. Furthermore, the patient can be bronchoscoped far more comfortably with the fiberoptic bronchoscope passed through the nose, than with the straight Jackson bronchoscope passed through the mouth. In

fact, the use of the Jackson bronchoscope is rapidly declining. The experienced gastroscopist cannot only visualize a gastric ulcer, but he can also frequently locate precisely the point from which significant bleeding is occurring.

In addition to these endoscopic instruments, various advances have been made in radiological diagnostic techniques which have strengthened our diagnosis of tumors. Mammography is now universally accepted and has an accuracy of perhaps 80-85% for the presence of malignant tumor, though both false negatives and false positives still occur. Tumor angiography is improving all the time, and this may prove to be a useful means of demonstrating malignancies of the body of the pancreas. Isotopic scans become ever more precise in the identification of tumor deposits. Venous catheter sampling of various enzyme or hormone concentrations now often provides material for diagnosis. For example, lateralization of parathyroid tumors is made possible by this means.

These and many other improvements in diagnostic precision are now available for the better management of cancer patients.

Cancer Chemotherapy. For the first time, there is clear indication that the appropriate use of multiple chemotherapeutic agents, in series or in conjunction with each other, can effect regression or cure of a tumor in circumstances where this was not previously thought possible. Therefore, there is an increasing tendency to approach the patient with the anticipation that surgery, plus radiation, plus multiple types of chemotherapy, plus immunological methods may all be necessary to produce the best possible result in a given patient. In fact, the time has come when the physician who treats cancer with surgery must be fully aware of what other modalities are available with which to treat the patient before, during, and following operation. One of my first completely convincing experiences with combined chemotherapy was that of a patient whom I accepted because her local physician had not been able to get her hospitalized otherwise. Inasmuch as one felt that the University Hospital should at least establish a diagnosis in any patient, regardless of circumstances, I accepted this patient on the surgical service. In brief, she had been operated upon elsewhere and a very extensive tumor, involving

most of the abdomen, had been identified. However, the bleeding had been so severe from large veins that the surgeons had simply closed the abdomen without getting a biopsy. The lady was severely cachectic and clearly in the terminal stages of cancer. We operated upon her and got a biopsy, which was reported to show lymphoma of uncertain type. Chemotherapy was started with four different drugs in various rotations, and three months later one would not have recognized the lady, she was so improved. The medical oncologist then requested that a splenectomy be performed, along with a survey of the abdomen to determine what tumor remained in the now normal appearing abdomen. At operation the spleen itself was moderately enlarged, and it contained a number of large whitish masses which proved to represent necrotic tumor with no viable cells. It has now been some years since this lady was operated upon, and she continues to do well. Thus, following the management of this particular patient, I personally began to take a different attitude towards the value of combined multiple chemotherapy and surgery. In a way, the recent definite progress in the effectiveness of chemotherapy in cancer has paralleled the progress in the transplantation of organs, especially the kidney. Actually, the early failures at human transplantation were experienced with the drugs which were already available, namely steroids and azathioprine (Imuran). The difference came when these drugs were used in different combinations and dosages. Initially, large doses of Imuran were used with relatively low doses of steroids, with the result that the white blood cell count fell disastrously and infection developed which proved fatal. Later on, large doses of steroids were used with modest to even low doses of Imuran, and granulocytopenia did not develop and allow invasive infection in the patient. Success came with experience and more appropriate usage of the two drugs which even now still represent the basic modality for preventing rejection of the renal allograft.

Immunology In Tumor Management. There is much current interest in the applications of immunology to tumor management. Immunological techniques are being applied to the diagnosis, treatment and long term surveillance of cancer. However, since so much professional

and lay discussion centers around immunotherapy, perhaps the first requirement is to acknowledge that thus far this modality has produced few actual cures. And yet, remarkable remissions have been achieved in some patients with melanoma, the tumor in which immunotherapy has been most promising thus far. Furthermore, this represents a conceptual breakthrough, since the demonstrated if limited success can probably be extended through further experience. In a way, the present status of immunotherapy might be compared with a different situation which existed in 1730. A surgeon in a French provincial city, I believe Lyon, had reported that he had performed a colostomy successfully. Supposedly, a commission was sent out from Paris to investigate this highly unlikely claim. The commission found that the surgeon did in fact have a living patient with a successful colostomy. The group returned to Paris with the report that it is often enough to know in the large that a thing may be possible and not to despair of it at first sight. At the very least, immunotherapy can even now produce remissions of some tumors in some patients.

The future of immunological measures in the total management of malignancy has broad implications. First, many patients with cancer have specific immunological defects in various of the immunoglobulins. These patients may lack the capability for producing immunological defenses against specific antigens which may be employed experimentally. These varying immunological defects are characteristic of certain types of tumors. Furthermore, this particular type of immunological investigation is only in its infancy. The fact that these specific immunological defects have been identified and regularly occur in patients harboring certain types of malignancy suggests that these demonstrated immunoglobulin deficiencies may offer leads to the diagnosis and management of such tumors. Moreover, it may be that these tumors grow and metastasize in the host partly because the immunological defenses against these tumors have been impaired by the tumor or by some other pre-existing deficit in the patient. In other words, tumor growth and metastasis is believed, more and more, to depend upon the immunological balances between the defenses of the host and the aggressive-

ness of the tumor. In addition, it is believed that most adult human beings have small tumors forming intermittently throughout life, but that the overwhelming majority of these tumors never are able to grow and metastasize because the body's immunological defenses keep them from doing so. However, immunological defects in the cancer patient may permit his particular cancer to grow.

Other types of evidence in support of immunological considerations in the metastasis of tumors have come from experience with transplantation of kidneys. Kidneys have been transplanted which harbored a tumor, especially bronchogenic carcinoma. Following this, administration of immunosuppressive therapy to the recipient patient has so reduced the immunological defenses of the patient that the small focus of tumor in the transplanted kidney has been permitted to grow and even to metastasize to the lungs of the recipient. In one instance the transplanted kidney was removed and immunosuppression therapy stopped, whereupon the lung metastases promptly regressed. The transplanted kidney was also rejected, along with the lung metastasis, but later a new kidney was transplanted to this patient successfully. Further, spontaneous tumors have developed in transplant patients receiving immunosuppressive therapy with an incidence which has been far higher than the incidence of tumor developing in the population at large. Immunotherapy is directed especially at reducing the lymphocyte population, for the lymphocytes have been identified as representing a major element in the immunological defenses of the host.

Many tumors produce specific antigens themselves, and antibodies against these antigens have been developed, to some extent, in an effort to use immunological tests to diagnose not only the presence of a tumor but also the relative extent of the tumor. In other words, by immunological methods it may become possible to quantitate the mass of tumor present in the patient.

Since there are a wide range of tumor antigens, there is considerable crossover in antigenicity among various tumors. This represents a vast field of investigation, and it is only beginning to be explored in a way that is affording practical use of tumor antigens and antibody pro-

duction in the diagnosis and management of malignant tumors. It is hoped that antigen-antibody reactions can be used to identify the location of metastases.

The patients with demonstrable immunological defenses may permit earlier metastases of tumors than might the patient whose immunoglobulins are normal. Going a step further, tumors appear in some instances to be capable of producing "blocking factors", substances that prevent the host from mounting an effective immunological attack upon the invading tumor. Such blocking factors tend to be absent or at a very low level when the neoplastic disease has been arrested, and by the monitoring of the level of the blocking factors in the serum, it may prove possible to determine whether the tumor is still actively growing or not.

I have noted that there are many different tumor antigens. Commonly, these may not be specific for a given tumor but may have a wide cross representation in a number of tumors. This represents a weakness in the potential value of immunotherapy, since it would be very difficult to obtain specific antigens with which to produce specific antigens against a given tumor. But on the other hand, this cross-antigenicity has certain advantages, in that a given substance may produce a degree of resistance against a variety of tumors. For example, some years ago a group of children in Chicago were vaccinated with the BCG vaccine to protect them against tuberculosis infection. It was later found that this rather non-specific booster of immunological defenses with BCG vaccine had apparently made these children relatively resistant to leukemia, since they appeared to exhibit a lower incidence of leukemia than did comparable groups of children who had not received BCG vaccine.

Thus, immunology enjoys a prominent position in current thought regarding the future diagnosis and management of tumors.

The Comprehensive Approach to Tumor Management. It was noted earlier that the surgeon who plans to devote his activities primarily to tumor management must not only be a competent surgeon himself, but that he now must also be fully aware of and fully sympathetic with the multiple therapeutic modalities that are developing for the total management of the cancer patient. All too often, the surgeon has

operated upon the patient and thereafter has not followed up aggressively to make certain that radiation, chemotherapy, and immunotherapy were exploited to the extent of present knowledge.

In general the surgeon does not usually operate upon a tumor that has already spread beyond the limits of the operative field. The exceptions to this have been situations in which the tumor was producing a metabolic abnormality or an anatomical abnormality which could be relieved by the operation, such as intestinal obstruction or the occlusion of a bronchus with abscess formation distal to the point of occlusion. However, within the confines of current thought regarding the management of tumors, there is the philosophy that it is at times useful to remove all of the tumor possible with surgical intervention, and thereafter to continue with a combination of radiation, chemotherapy, and immunotherapy to reduce the residual tumor to the lowest possible level. This is not to say that a truly hopeless situation should be attacked, leaving the patient miserable for the remainder of his or her life. Nevertheless, the hypothesis is that if the bulk of the tumor can be removed surgically, radiotherapy may prove to be useful for the remainder, followed by chemotherapy to still further reduce the volume of tumor, and finally to use immunotherapy for remote portions of the tumor in very small metastases. Thus far, immunotherapy is effective against only very small masses of tumor but, like chemotherapy, it does permit the therapy to reach multiple distant metastases.

Still another feature of cancer management is the constant modification of ideas relative to the management of specific tumors. The radical mastectomy of Halsted is being widely replaced by the modified radical mastectomy which preserves the pectoralis muscles and results in considerably less deformity. Less radical operations upon the rectum have regained some popularity, as opposed to the rigidly performed abdom-

inoperineal resection in every patient. For example, 25 years ago virtually every patient with a carcinoma of the mid-rectum had a Miles procedure, whereas now the low anterior resection has been shown to be almost as curative as the abdominoperineal resection, and these low resections with end-to-end anastomosis are widely employed when they are technically possible. The management of almost every important type of human malignancy is under reassessment.

Specific Progress in Cancer Management. With all the new interest and new techniques available for the diagnosis and management of cancer, it is fair to ask ourselves whether or not the results in cancer management have actually improved. I have identified certain specific tumors in which treatment has certainly prolonged comfortable and useful life substantially, even if complete cure was not achieved. And after all, most treatment in this life has the net result of "buying time". However, a physician who manages patients with leukemia tells me that improvements in the management of acute leukemia in children have raised the percentage for one year survival from 10% to 60%. Another example of recent progress in cancer management is the actual cure of a number of patients with Hodgkin's disease with a combination of radiation and multiple chemotherapy. The story of the effectiveness of radiation and multiple drug chemotherapy of Wilms tumors in children is well known and widely applauded. These results with specific tumors have been achieved through intimate collaboration between surgeons, radiation therapists and chemotherapists.

I would conclude this address by saying once again how honored I am to have been invited to present the Hara Lecture this year. This review of the current status of cancer management is completely in harmony with the spirit and force for progress which Dr. Hara epitomized in his lifetime. The problems which confront us in cancer management remain vast and formidable. Yet they are not insurmountable and Masauki Hara would not have been dismayed.





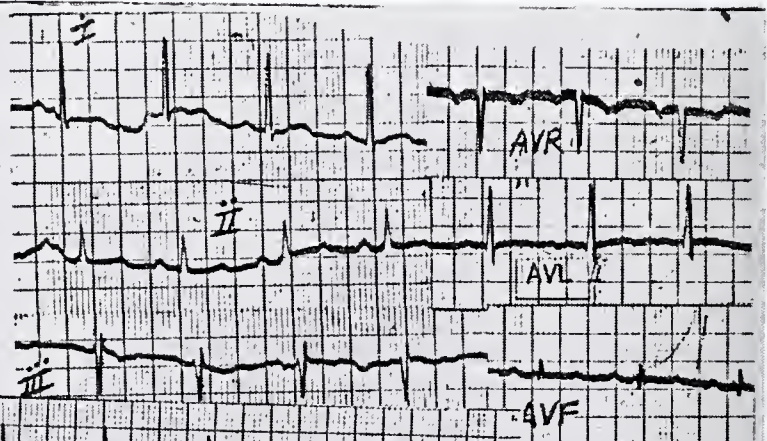
ELECTROCARDIOGRAM

OF THE MONTH

The Department of Cardiology, University of Arkansas Medical Center

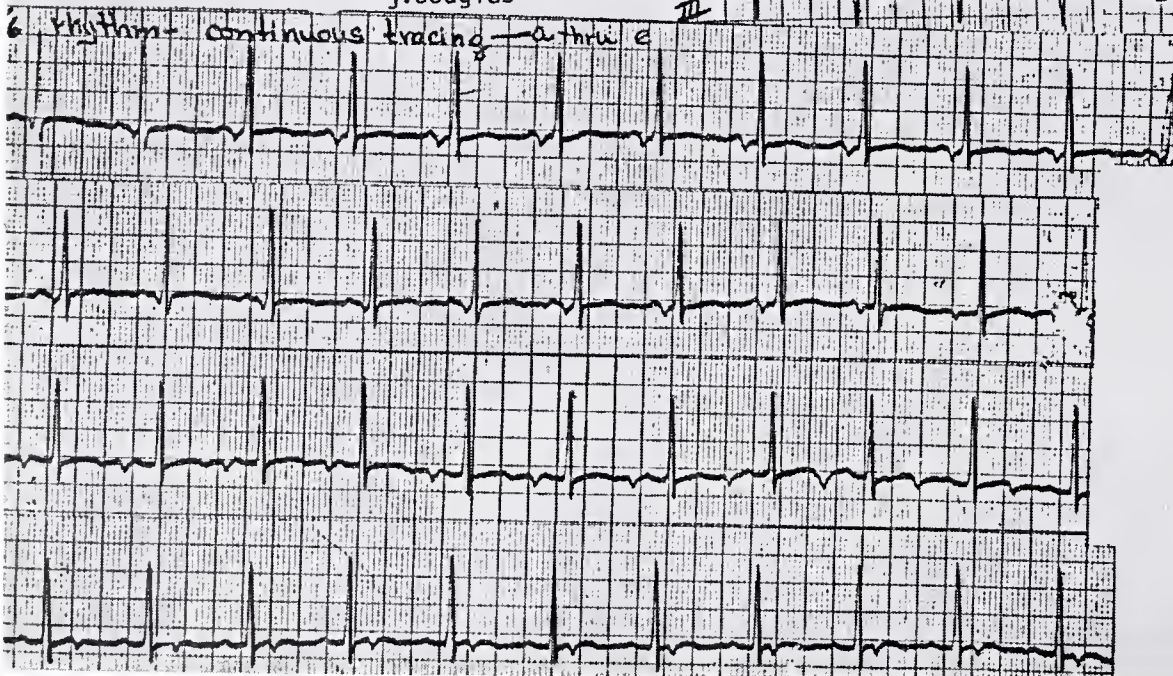
(See Answer on Page 454)

28 yr old male who got drunk night before this tracing, developed some chest discomfort, vomited and presented to emergency room. ECG shown was obtained during symptomatic period.



j. Douglas

6 rhythm - continuous tracing - a thru e



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Office Orthopaedics

Common Shoulder Problems

H. Austin Grimes, M.D.*

There are innumerable problems besetting the shoulder, but this discussion will be limited to consideration of the more common ones. Specifically, (1) degenerative tendinitis, (2) acute tendinitis, (3) rotator cuff injuries, (4) bicipital tenosynovitis or tendinitis, and (5) acromioclavicular arthritis. In previous statements regarding the shoulder the terminology has been rather confusing and it has been categorized into presenting symptomatology without regard to the specific sites of pathology anatomically. You will note in the discussion of differential diagnoses of the more common disorders I have avoided such terminology as bursitis and frozen shoulder. These terms are more or less an end result of the common disorders mentioned above and should not be considered as diagnoses.

Description of the exact anatomical motion of the shoulder is rather involved and frequently requires reference to the standard of description published by the American Academy of Orthopaedic Surgeons or similar publications. There is no simple descriptive terminology adequate for quick reference and I refer you to the above publications for description of the exact range of motion.

A detailed history of the onset of shoulder pain is paramount. The patient's occupation should be noted as well as sports activities or hobbies which may contribute to his complaint. Sometimes the patient may have performed some unusual task prior to the onset of the painful shoulder condition. Exercising to an unusual degree often precipitates shoulder problems.

During history taking, as we are all familiar, we are determining whether the patient's complaint is about the shoulder or whether he has some underlying fear of cancer, cardiac disease, or other serious disease which prompted his appearance at your office. Later, after examination of the patient has been carried out and x-rays made, one should allay this apprehension when possible.

In preparation for examination of the shoulder, it is helpful to have the patient undress, preferably with both shoulders exposed so as to observe any difference. The associated muscles about the shoulder may be in spasm and the position of the shoulder may be different. Ask the patient to go through the motion which causes the pain, if he is able to do so. If he is in the acute stage he will block all shoulder motion and at this time examination is difficult and will be limited primarily to palpation of the shoulder.

In reviewing the anatomical insertions of the rotator cuff tendons, the bicipital tendon and groove, and the acromioclavicular joint, it is easy to see they are in a rather small area. (Fig. 1) In the fat or muscular shoulder it is difficult to pinpoint the area of complaint. The patient will complain of pain when the area of exquisite tenderness is palpated and you will have to rely on experience and judgment to determine the exact anatomical lesion. The areas of consideration are the insertions of the teres minor, the infraspinatus, the supraspinatus, the bicipital tendon and groove, and the acromioclavicular joint. These sites are usually exquisitely tender

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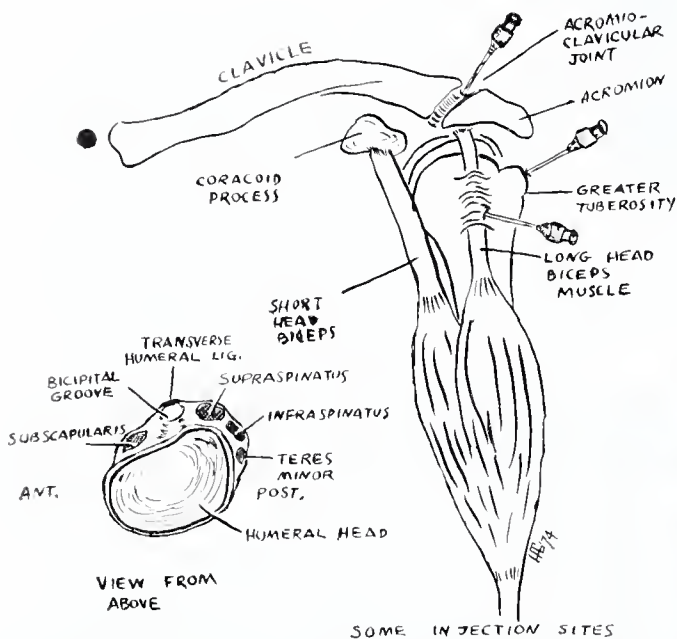


Figure 1

and there may be increased warmth and swelling, but rarely redness.

X-ray examination of the part consists of an AP view of the shoulder with the hand in neutral position. This view is usually sufficient to make a diagnosis. Other views sometimes beneficial to diagnosis are internally and externally rotated views of the humeral head and occasionally an axillary view. The latter is a very helpful view, but I think it is often overlooked. Transthoracic views are of limited use because of the overlying tissue and superimposition of bone. Its use is primarily limited to outline of fractures.

The first common disorder to be considered is degenerative tendinitis. Frequently these complaints are commonly diagnosed as bursitis, but refer specifically to the position on the rotator cuff where the tendons insert. The patient describes pain in his shoulder, always constant. He has noted a "catch" in the arm with sudden loss of grasp of the object he is holding and inability to maintain the shoulder abducted or flexed. The arm falls to the side and is followed frequently by muscle spasm. It is not always desirable to attempt to elicit the painful position, except when tenderness over the area is vague or non-existent. Palpable, even audible, crepitus in the shoulder at times helps localize the area of complaint, but painless crepitus is more often the rule. Usually the area of maximum tenderness is over the cuff and not over the biceps tendon, or over the acromioclavicular joint and may or may not be exquisitely tender.

(Fig. 2 and 3) This can be demonstrated on x-ray in the acute and chronic phase. There are variations in the shape and degree of calcification depending on the stage presented at your office. Often x-rays are of no benefit, but they should be made routinely, for ruling out of other problems.

On occasions superior sulcus tumors present with right shoulder pain and of course cardiac symptoms often present as left shoulder pain. Degenerative tendinitis is as the result of daily



Figure 2



Figure 3

wear and tear and will be aggravated when repetitive type motion is carried out.

The treatment of degenerative tendinitis is conservative in nature and includes injection therapy. Sterile techniques are always emphasized for injection of the shoulder. The injection site should be carefully prepped using sterile gloves, needles, syringes, etc. Various anesthetic agents such as 1 or 2% Xylocaine in amounts of 5 to 10 ml. are injected directly into the area of maximum tenderness.

Systemic medication, primarily analgesics and aspirin containing drugs, when tolerated, are about as beneficial as some of the newer drugs. However, buffered phenylbutazone may be given over a short period of time effectively, using two tablets three times a day for three days, then one tablet three times a day for three days, and then one tablet twice daily for an additional period of two weeks. Caution should be taken in prescribing this drug and it should be followed with complete blood counts and discontinuation of the drug altogether if there is any suggestion of leukopenia or anemia.

The oral use of steroids should be on a schedule of decreasing dosage and these are administered with the usual degree of caution. Physical therapy in the form of home exercises is the preferred form of treatment. Prolonged physical therapy is not usually necessary, but the use of hot packs or ice packs, or alternating hot packs and heat lamp are of limited benefit unless an exerciser program is carried out simultaneously. The patient should be encouraged to carry out an exercise program at home, but the physician should schedule regular office visits or visits to the physical therapist to be sure the patient is carrying out the exercise program properly. It may be that this will have to be done routinely to get the patient moving the shoulder through the desired range of motion. The usual home routine for shoulder exercises consists of arm swinging, arm rotation, recumbent arm swinging, wall creeping, and shrugging of the shoulders. Surgery may be performed when resistance to all conservative measures occurs.

In patients with acute and chronic tendinitis or chronic tendinitis with an acute episode, with or without calcification, the signs are more dramatic. Often with sudden jerking movements,

such as coughing or sneezing, exquisite pain in the shoulder results in muscle spasm, especially into the deltoid and often radiates to the neck along the trapezius and over the suprascapular region. These patients may even have suboccipital headaches in association with the radiation of neck pain from the shoulders. The pain is exquisite and there may be increased warmth to the skin about the shoulder as well as exquisite tenderness over the calcified and acutely inflamed point of maximum tenderness or the area of complaint. Active motion of the shoulder is limited to only a few degrees. Internal and external rotation of the arm and pronation and supination of the hand may cause acute episodes of muscle spasm.

X-ray examination usually shows a calcific deposit overlying the area of maximum tenderness. However, if the calcification is far removed from the area of maximum tenderness the diagnosis of calcific tendinitis is questionable. Injection therapy, with local anesthetic, in an attempt to break up the calcific deposit with the needle is sometimes beneficial. Frequently there is a gritty sensation as the needle penetrates the calcific deposit and the needle is then partially withdrawn and replaced at different angles to break up the deposit. Strict sterile technique should be utilized for irrigation and cross-irrigation techniques as with all injections. If the calcific deposit is fluffy and more cloud-like in appearance on x-ray, it may be more likely aspirated than the well defined calcified deposits. Pain will usually preclude a vigorous exercise program for about three or four days, even after successful aspiration of the calcific deposit. As soon as the patient is able to carry out exercise, encourage him to lift the arm forward, touch the opposite shoulder, reach to the back of the neck, reach to the waist, start at the shoulder level and creep upward on a wall or door. Occasionally he should put a towel over the doorway and pull the arm up with the opposite hand. Another exercise, when active use of the muscle is painful, is assisted passive range utilizing a broomstick or cane. This is done by putting the affected hand on the broomstick and pushing with the good hand away from the body in all directions, forward, to the side, and backward. I discourage the use of x-ray treatment of these lesions in the office

as it results in excessive exposure to the patient and is of questionable benefit. Rarely operative treatment is indicated for calcified bursitis or tendinitis.

In injuries to the rotator cuff, examination of the shoulder during the first 72 hour period is extremely difficult. The patient is unable to abduct, extend, or flex the shoulder, but this in itself is not indicative of the part that is ruptured. (Fig. 4 and 5) It has been erroneously stated that the supraspinatus tendon initiates abduction and flexion of the deltoid takes over after it reaches a certain degree. This, however, is not true. When the pain is exquisite it does not matter which of the tendons is ruptured or if the entire cuff is separated, the patient is not going to be able to move the arm during the first 48 to 72 hours post-injury. During this period of time it is better to keep the patient at rest with the affected arm in a sling. When the patient is having exquisite muscle spasm and pain in the shoulder frequently bed rest is indicated with the head of the bed elevated and three or four pillows behind the shoulders and back to support the arm at rest. At times the



Figure 4

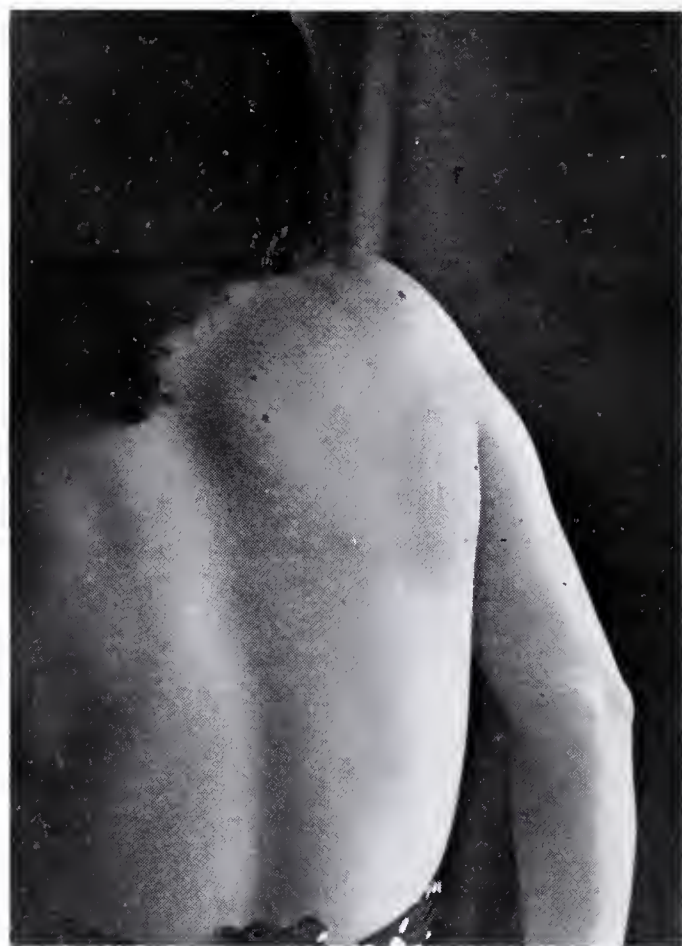


Figure 5

injection of muscle relaxants intramuscularly distant from the site of complaint or oral intake of muscle relaxants might be of benefit. Usually the pain is so intense that narcotics are necessary to assure rest and support. After about three days, examination of the part might be more easily accomplished.

Flexion, abduction, and extension may be executed in partial tears. The usual history in a rotator cuff tear is of an injury, a fall either on the outstretched hand with the appearance of shoulder pain later, or a fall directly on the shoulder itself with immediate pain in the shoulder. Pain, stiffness, and weakness about the shoulder are difficult to localize, but the upper end of the humerus is generally the area of maximum tenderness. The point of maximum tenderness may sometimes be elicited by externally rotating the arm while palpating the humeral head. In general, flexion of the arm with the arm held straight out in front of the patient is difficult or impossible to manage. In instances where the patient can accomplish this maneuver sustaining this against resistance is not done if there is a partial tear. Inability to sustain the fully flexed position usually indicates

a complete tear of the rotator cuff. Not all complete tears of the rotator cuff require surgical intervention. The elderly patient is discouraged from having surgery simply because the recovery of range of motion is insufficient to warrant the surgical risk.

Local injection of an anesthetic agent three or four days post injury frequently will allow you to carry through an evaluation of the continuity of the tendon or cuff. By the use of electrical muscle stimulation of the supraspinatus and infraspinatus you should get a good response of abduction of the arm. If this fails to occur and you get a poor response, the likelihood of having a complete or almost complete tear is present. Arthrography is often helpful in delineating the rupture, spilling out of dye outside the capsule of the joint itself into the rotator cuff tendons. Many times it will be impossible to distinguish between the partial tear or strain and the complete tear. In these instances a period of several days or weeks may pass before a diagnosis can be made. Degeneration of the rotator cuff may or may not precede the acute rupture of the tendons and is of interest only when making a diagnosis, but does affect the prognosis. When the diagnosis of a complete tear of the rotator cuff is established, this should be surgically repaired. Consideration must be taken into account in evaluating the patient over the age of 60 for operative repair. That is generally what you would do for any type of injury, but especially in the shoulder because of the limited return of normal function in this age group. The earlier the diagnosis is made, the easier it is to repair the defect, and the better the prognosis generally. I have seen a partial tear of the rotator cuff which healed with fairly good recovery of range of motion and use, suddenly, with very little or no trauma, experience complete tendon rupture. In the non-operative cases the exercise program is to be carried out by the patient at home and should be followed periodically for evaluation of recovery of range of motion and the degree of effectiveness of the program.

Next is consideration of bicipital tenosynovitis or tendinitis and some of the causes and effects of the bicipital lesion. The biceps tendon originates above the glenoid rim and passes down through the bicipital groove. It therefore has

a long course and with the extremes of motion the shoulder carries out, it is easily damaged and inflamed by unusual activities, especially overhead work, even in a normally healthy young individual. As age takes its toll and in the over 40 years of age group, the biceps tendon becomes even more prone to injury and inflammatory changes subsequent to unusual use or excessive use. Even normal use may cause symptoms. A specific episode of injury is frequently not elicited in the history. The tendon may become so degenerated that minor trauma may completely rupture it. The resulting deformity at the upper end of the biceps muscle is exquisitely tender in its acute stage. In instances of complete rupture of this tendon, surgical intervention may be indicated for reimplantation of the biceps tendon into the proximal humeral head. In the chronically debilitated and elderly patient, surgical intervention is usually not necessary. However, it should not be ruled out simply because of age.

Another lesion of the bicipital groove is dislocation of the bicipital tendon out of the groove. (Fig. 6) This is due to anatomical defect



Figure 6

of the bony groove, and can be accentuated by trauma. Exquisite tenderness of the biceps tendon in the anterior portion of the shoulder over the bicipital groove is characteristic of this lesion. This is sometimes demonstrated with the arm held in abduction 90 degrees and the elbow flexed 90 degrees, the hand is then lowered with internal rotation of the humeral head and with the palpating fingers in the bicipital groove one will be able to palpate the dislocating tendon. This maneuver is often associated with exquisite tenderness.

Inflammatory changes of the bicipital tendon occur frequently in the groove and may not be associated with dislocation or rupture or any of the other causes already mentioned, and is the more common lesion. (Fig. 7) X-rays should be made, frequently these do not benefit the diagnosis except in very special views to demonstrate the abnormally shaped bicipital groove in those instances of dislocation of the biceps tendon.

Injection therapy suffices to give fairly satisfactory relief of symptoms the majority of the time, utilizing 1% Xylocaine along with 1 ml.



Figure 7

of one of the steroids. (Fig. 1) Effort is made during the injection not to inject the tendon itself, but rather to pierce the tendon, withdraw from it, and then inject the area around the tendon in the bicipital groove in multiple sites. In our clinic we use a special one inch 26 gauge needle which does little damage to the tendon and the tendon sheath and is not as painful to the patient. Afterwards we encourage the patient to use the arm normally and prescribe analgesics and mild sedatives for relaxation. Caution the patient that the effects of the injection usually take about 36 to 48 hours to become apparent and analgesics are frequently indicated to supplement the injection during this period. The position assumed for injection of the bicipital groove is with the patient seated and the elbow flexed at 90 degrees and the hand in full supination to relax the biceps muscle. After sterile prep of the shoulder, the gloved hand is used to palpate the bicipital groove and the area is then injected at the point of maximum tenderness in the manner described above.

The last common lesion to be discussed is acromioclavicular arthritis. (Fig. 1) This is frequently overlooked as a possible diagnosis in the painful shoulder. However, this occurs most notably in persons who have pain in the shoulder when the arm is held above 90 degrees of abduction. Raising the arm higher causes rotation of the clavicle on the acromion and pain becomes more pronounced as the patient elevates the arm. There may be hypertrophic bone spur formation in this area by actual visual examination and palpation. This may be corroborated by x-ray of the area.

Attempts at avoiding overhead work help to decrease the symptomatology. Occasional injection of the area of the acromioclavicular joint with small amounts of steroid and anesthetic agent is also helpful. In resistant cases, resection of the outer 5/8 inch or so of the clavicle is beneficial.

In all of these relatively common disorders of the shoulder an exercise program within a few days of the active treatment is mandatory to restore a physiological range of motion. However, in resistant cases, further conservative treatment is usually of little benefit and surgical intervention becomes necessary.

In summary, shoulder complaints are very common in most offices and several ways of approach to the problem have been presented. The treatment consists specifically of injecting the area of maximum tenderness locally with a mixture of local anesthetic and steroid, or local anesthetic alone, administration of systemic anti-inflammatory drugs, relieving night pain with light sedatives and hypnotics, and positional relief by the use of extra pillows, etc. Demonstrating routine exercises and encouraging the patient to perform the exercises even in the face of discomfort helps to restore a physiological range of motion. Other physical therapeutic

modalities, such as ultrasound, medcosonators, etc., have been reputed to be helpful, but they have no proven value as to their effect on tissue. What is important is that the patient receives benefit from whatever modality of treatment employed. In cases which require further work up it may be necessary to do an arthrogram. When a frozen shoulder syndrome has developed from one or more of the conditions discussed, forced manipulation under anesthesia only serves to tear the tissues for the most part and further restriction of the anatomical range of motion will develop. Gradual stretching of the adhered capsule is preferred even in very persistent cases.



PUBLIC HEALTH AT A GLANCE

Meet the V. D. Epidemiologist**

Daniel C. Vandermeer*

The venereal disease epidemiologic investigator is now an established discipline in local and state health departments and in the federal government. This group of specialists was created in 1949 and 1950, when federal funds financed interview, research, and training centers. These centers in Washington, D. C., Hampton Roads, Virginia, and Alto, Georgia, had a dual function: to develop interview techniques and patterns to motivate patients with venereal disease to identify their sexual contacts to a health department representative, and to teach these skills to public health workers.

Such investigators could be nurses or physicians, but the time needed for VD investigation would severely limit the time available for generalized practice. When a patient has syphilis, several intensive and prolonged interviews are needed to help a patient understand how he can

help himself and prevent others from becoming infected in the future. It is not unusual to spend many hours following up limited locating information in the search for contacts who are reluctant to be interviewed about venereal disease.

The public health nurse still occupies a pivotal position in the VD control program. She administers the venereal disease clinic and works with young children and pregnant women, who are affected by venereal disease at a particularly sensitive period in their lives. In some areas, such as Massachusetts, nurses comprise the entire case-finding staff.

The U. S. Public Health Service, through its Center for Disease Control and the Venereal Disease Branch, provides grants of funds and personnel for local VD control programs. Such personnel are assigned to provide field epidemiologic assistance.

All the federal assignees are college graduates who have exhibited sincere concern for people,

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objectivity, ability to communicate, and persistence.

After an orientation period, a VD epidemiologic investigator is sent for training to an established school for venereal disease epidemiology in either Atlanta, Chicago, Los Angeles, or New York City.

He returns to his home or assigned area to work under the careful tutelage of an experienced member of the VD control staff. During his first year, the new federal employee is on a probationary and training status. He is given a series of more challenging assignments and greater responsibilities as he demonstrates his growing competence.

The first task given the neophyte investigator is probably the most difficult he will perform: the complete epidemiologic development of a case of syphilis.

He begins by talking with the patient, trying to allay his fears and describe the function of the health department in the control of VD. He teaches the patient about modes of transmission, the incubation period, asymptomatic and symptomatic VD, and the consequences of an untreated infection. He then asks the patient to provide the names and locating information for all of his recent sexual partners.

Here the interviewer usually is called on to answer one or a combination of questions which reveal very real problems: How can I tell my wife or steady girl friend about my disease? Can you get someone examined without their parents knowing? How can you find a casual or single-time contact whose full name, address, or telephone number is not known?

After the contacts are named, the investigator attempts to arrange for their immediate examination and treatment. He visits each contact, giving the news of his exposure to a venereal disease as tactfully as possible. Every effort is made to protect the confidence of the contact and the patient. If the contact will see a private physician, the doctor must be alerted to the kind of examination necessary.

As the case develops, reinterviews of the patient are required. There may be a need for better information to locate a contact. Frequent-

ly, the source contact will not be determined, and the patient must be asked to re-examine his sexual history to remember contacts he may have had months earlier. This effort often leads to the discovery of new cases of syphilis and the process starts over again.

As he gains experience, the VD epidemiologic investigator represents the health department in its community action programs. The VD epidemiologic investigator has been particularly effective in community education campaigns. He is available for public speaking and works with the media to help overcome the ignorance and taboos surrounding venereal disease. His career is dedicated to the reduction and eventual elimination of one of the oldest and most persistent public health problems.

— Daniel V. Vandermeer,
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through Salvador Mier, Director
Venereal Disease Section
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Little Rock, Arkansas



ANSWER—Electrocardiogram of the Month

Ventricular rate = 80-90

Atrial rate = two different atrial rhythms: one with small positive P waves in V_1 — the driving atrium, and one with a sharply negative P wave in V_1 — the dissociated atrium. The remainder of the ECG is unremarkable. This then is an example of atrial dissociation with the two atria firing independently. Hiccoughs and electrical artifacts are commonly mistaken electrocardiographically for atrial dissociation. Recent review articles emphasize the ominous nature of this arrhythmia. These reviews are wrong! Although atrial dissociation is seen in pre-maribund patients, it is probably more common than appreciated, and may occur in relatively healthy individuals. Recent work by Zipes, et al, indicate that atrial dissociation is probably the mechanism underlying unstable atrial flutter-fibrillation. I personally have seen two cases of atrial dissociation in alcoholic intoxicated healthy young men who have had no dysrhythmias after they sobered up.



EDITORIAL

Renal Disease

Alfred Kahn, Jr., M.D.

The clinical investigation of two renal diseases: lipoid nephrosis and membranous glomerulonephritis has been reported by Pollak, Rosen, Pirani, Muchrcke, and Kark (*Annals of Internal Medicine*, Vol. 69, p. 1171, Dec. 1968). They made a long term study of 21 patients with membranous glomerular nephritis and 21 patients with lipoid nephrosis. They defined lipoid nephrosis as "the nephrotic syndrome irrespective of the presence or absence of azotemia, associated with the finding of normal or virtually normal glomeruli by light microscope." They define membranous glomerulonephritis by describing its histologic characteristics consisting of "diffuse thickening of the glomerular basement membranes with hematoxylin and eosin, PAS, and silver stains of thin sections. There is no, or at most questionable cellular proliferation"; this disease occurs in patient with the nephrotic syndrome.

Pollak, et al, studied their cases clinically and also they took one or more percutaneous renal biopsies, which were examined by both light and electron microscopy; these cases gave no history of past renal disease of systemic disease, and they all had massive proteinuria.

Both groups of patients were assessed for clinical symptoms at the time of the first biopsy. Lipoid nephrosis cases had edema on an average for six months. Membranous glomerular nephritis had edema for about ten months. Edema was the outstanding physical abnormality in both diseases. Laboratory studies were not helpful in deciding which patient had lipoid nephrosis from membranous glomerular nephritis initially.

The lipoid nephrosis initial biopsies, using light microscopy, showed virtually no changes; there was some dilatation of the capillaries. The

tubules showed occasional focal atrophy and mild interstitial fibrosis; the tubular cells contained droplets. The clinical course of lipoid nephrosis was summarized as follows for the patients on ACTH and adrenal steroids: eight had excellent response initially, two had good, one had partial, and six had no response; about the same ratio occurred with subsequent flare-ups. Three patients with lipoid nephrosis died; two deaths were due to infection and the third was not determined.

The initial histologic examination of membranous glomerular nephritis revealed thickening of the glomerular basement membrane in all cases; other changes were variable and minimal. The tubular changes were said to resemble lipoid nephrosis but abnormalities as "vascular sclerosis, interstitial inflammation, and fibrosis were more common." Later biopsies taken from eight patients, at varying intervals, showed only minimal basement membrane thickening; they found no evidence of chronic lobular nephritis, consistent cellular proliferation, adhesions, or crescents; the tubules remained almost unchanged.

Pollak's 21 cases of membranous glomerular nephritis consisted of 17 patients with nephrotic syndrome and four patients with asymptomatic proteinuria; the latter did well clinically. Some of the 17 cases of membranous glomerular nephritis with nephrotic syndrome were treated with prednisone with no decrease in proteinuria. Two patients died despite treatment; 13 patients had normal renal function; six patients had azotemia and heavy proteinuria.

An effort was made to try and correlate basement membrane thickening and the duration of the illness; there seemed to be no correlation in lipoid nephrosis; there is reported to be some correlation in membranous glomerular nephritis,

and in membranous glomerular nephritis interstitial fibrosis tended to parallel the length of the illness. Proteinuria did not parallel basement membrane thickening but in membranous glomerular nephritis elevation of creatinine and blood urea nitrogen were seen more often with thickened basement membrane. When the nephrotic syndrome was present, the amount of albumin in the urine seemed to depend on proteinuria. Serum albumen and serum levels were said to have a linear relationship.

Golde and Epstein have recently studied a case of "Mixed Cryoglobulins and Glomerulonephritis" (*Annals of Internal Medicine*, Vol. 69, p. 1221, Dec. 1968). They point out that the studies on immune globulins and glomerulonephritis seem to be of two types:

where the antigen attaches to the glomerular basement membrane and secondly, where an antigen-antibody complex fixes to the basement membrane. Their case was a 54-year-old man who had glomerulonephritis, vasculitis purpura, and cryoglobulins which were a complex containing immune globulins G and M. This patient expired despite treatment with prednisone and chlorambucil. His serum on seven occasions contained a mixed cryoglobulin, normal amounts of complement on three occasions, and four assays for rheumatoid factor were elevated. Tissue studies using fluorescein stained antisera showed a fixation of the antibodies for immune type G, immune type M, and beta 1C globulin complement component with kidney glomeruli and the walls of small blood vessels.



MEDICINE IN THE



THE MONTH IN WASHINGTON

The American Medical Association has announced the filing of a law suit against the Cost of Living Council to seek an end to all economic controls on medicine.

At a news conference in the AMA-Washington office, the organization disclosed that it is seeking an injunction against the Phase IV regulations on physicians and hospitals. It charged that the rules are "confiscatory, arbitrary and capricious," that they violate the "generally fair and equitable" standard established by Congress and that they violate the fifth amendment of the U. S. Constitution.

Announcement of the legal action was made by Russell B. Roth, M.D., President of the AMA, and James H. Sammons, M.D., Chairman of the AMA Board of Trustees.

In its complaint stating its legal action, the AMA pointed out that the Phase IV regulations represent an "attempt to mold the health care

delivery system to comport with the CLC's concepts for health care" and are specifically designed "to curb the quantity and quality of health care services as an integral part of the legislative program to induce Congress to enact national health insurance."

The AMA asked that the court declare these Phase IV regulations invalid and enjoin the Cost of Living Council from enforcing them.

In his statement, Dr. Roth said the AMA was filing in U. S. District Court, District of Columbia, a suit seeking an injunction against the Cost of Living Council. "We are asking the court to declare invalid the Phase Four regulations as applied to physicians and hospitals on the grounds that they are confiscatory, arbitrary, capricious and discriminatory.

"We further believe that they violate the very law on which they are based in that they do not conform to the 'generally fair and equitable' standard written into the law by the Congress.

"Finally, we believe that they violate the most fundamental law of the land — the Constitution of the United States in that they confiscate the property of physicians and hospitals without due process of law, a clear infringement of the fifth amendment.

"Those are the legal tenets on which we are basing our case. We are convinced that they are valid and sound and that they will prevail in the courts.

"But while we proceed on legal grounds, I think it is important to point out that we believe the issues involved are far broader than mere legalisms and that they cast their shadows far beyond the limited scope of Phase IV.

"They are issues of principle and they have profound implications for the future of health care in this country.

" . . . It is patently unfair and unreasonable for the services of some working people — namely us physicians — to be subject to severe price controls while permitting other working people to function in a free market. That is not fair play; it is an act of discrimination.

"It is patently unfair to apply a revenue margin limitation to physicians in private practice so that they are penalized if they work longer hours and see more patients. That is not fair play; it is an act of capriciousness — not to mention that it is also short-sighted as hell.

"It is patently unfair when physicians are subject to controls but chiropractors and naturopaths are not . . . when ophthalmologists are subject to controls but optometrists and opticians are not . . . when psychiatrists are subject to controls but clinical psychologists and psychiatric social workers are not. That is not fair pay; rather it is an act so arbitrary as to be vindictive.

"Any one of these would be good and sufficient reason to end the controls, in and of itself. For a law that is applied arbitrarily, capriciously and vindictively is a bad law and ought to be abolished.

"But there are even more compelling reasons why the controls should be abolished — not just from health care but from the entire economy.

"Perhaps the best reason for getting rid of them is that they just don't work . . . "

Dr. Sammons' statement noted that the AMA did not stand alone in its call for an end to all controls. "No less a person than C. Jackson

Grayson — chairman of the Price Commission during Phase II — has adopted the same stance," Dr. Sammons said, adding "he has been echoed by the Wall Street Journal and others."

"In the face of this advice and the evidence that controls don't work, why does the Cost of Living Council persist in continuing the controls?

"CLC officials have made no secret of the fact that they intend to control far more than costs in the health care field through their regulations. The press release from the CLC announcing Phase IV established these goals:

" ' — reduce the inflationary rate of increase in the cost of hospital stay;

" ' — provide economic incentives for the substitution of less expensive ambulatory care in place of inpatient hospital care where possible;

" ' — maximize internal flexibility and incentives for health care managers to improve productivity;

" ' — be responsive to cost saving innovations, such as health maintenance organizations and prospective reimbursement plans . . . ' "

"Further, to enforce the last of these goals, the Phase IV regulations were drawn to confer outright favoritism on physicians under contract with an HMO. They have been exempted from the revenue margin limitation that is applied to physicians in private practice.

"This is not economic stabilization. This is not inflation control.

"This is nothing less than a blatant attempt by the social schemers at CLC to impose their will on the physicians and patients of America.

"What right have they to tell us how to practice medicine?

"What right have they to tell the American people where and how they shall receive their medical care?

"These are *not* economic controls . . . they are political controls. We intend to fight them right down the line . . . "

"We recognize how appealing it is to try — through controls — to keep the lid on at least some costs during this period of astronomical inflation. We certainly recognize and are sensitive to the plight of the great majority of wage earners who have been caught in this terrible squeeze. We have tried to do our share to keep costs down.

"Since the beginning of Phase I in August 1971, physicians' fees have risen but 7.3 per cent while the cost of living generally has risen by 13.3 per cent and legal fees, by contrast, have risen by 26 per cent.

"We have cooperated — the figures prove that. But now the time has come to call a halt.

"For the simple truth is that unless the controls are removed — and soon — the quality of health care — particularly in the hospitals — is going to suffer.

" . . . And that is precisely what is going to happen very soon if the controls continue.

"We believe that American people had better know and understand that."

* * * *

One day after the AMA filed its suit against the Cost of Living Council President Nixon reaffirmed the Administration's intention to keep cost controls on hospitals and physicians until a national health insurance program is approved.

In a second message on health submitted to Congress, the President also emphasized a shift in policy on health education from operating subsidies to direct assistance to students. Nixon said "The nation's total supply of health professionals is becoming sufficient to meet our needs during the next decade. In fact, oversupply in the aggregate could possibly become a problem."

On controlling health costs, the president said "we must avoid the cost inflation which followed the introduction of Medicare and Medicaid. Our health insurance proposal would call for states to oversee the operation of insurance carriers and establish sound procedure for cost control. Until these or other controls are in place, I recommend that our present authorities to control health care costs be continued. I am asking the Congress for such authority." Inflationary pressures are still strong in the medical field, he said, "so that we must maintain federal controls until other measures are adopted under comprehensive health insurance."

* * * *

Shortly after an AMA delegation met separately with President Nixon and Health, Education, and Welfare Department Secretary Casper Weinberger, the latter announced he would drop the hotly contested proposed regulations that would have required pre-admission certification for the

hospitalization of Medicare and Medicaid patients.

The President had assured the AMA delegation earlier in the day that serious consideration would be given to changing the controversial pre-admission certification plan.

Those visiting the President were Russell Roth, M.D., AMA President; James Sammons, M.D., Chairman of the AMA Board of Trustees; Malcolm Todd, M.D., AMA President-elect; Ernest B. Howard, M.D., AMA Executive Vice President, and Joseph Miller, Assistant Executive Vice President.

Other topics discussed by the President and the AMA group included the Administration's plan for statewide fee schedules in its national health insurance proposal and area designations for Professional Standards Review Organizations (PSRO's).

The AMA delegation told the President of their strong opposition to the pre-admission certification plan as an unwarranted interference with medical and hospital judgments; contended that continuation of fee controls on physicians would be unfair and punitive; declared that fee schedules in a NHI program would be government regimentation; and suggested that the PSRO program needed regrouping and a new start after encountering stiff resistance from physician groups and much controversy and confusion.

The Chief Executive, according to participants, warmly received the delegation and declared he was aware of the problems physicians face in the area of expanded federal supervision. President Nixon indicated serious consideration would be given to changing the requirement of area or statewide fee schedules in his NHI plan. He stressed that he wished to avoid saddling physicians with unnecessary paperwork that would take time away from patient care.

The President also talked of his desire that high level quality care be maintained. Physicians should work for patients and not for the federal government, he told the delegation. He outlined his NHI program and his opposition to a bill of the scope of the Labor-Kennedy plan.

Conceding that the Administration's programs might well be amended by Congress, he invited the AMA to recommend changes in the NHI program.

* * * *

The federal government will spend more than \$26 billion next fiscal year on civilian health programs if the Administration's proposed budget is approved by Congress.

The budget reflects the Administration's desire to hold health spending in the fiscal year that begins July 1 to about the level Congress approved for the current fiscal year, considerably more than requested. The exception is an unavoidable \$3 billion hike in Medicare and Medicaid outlays.

The new health budget is almost \$8 billion over the spending in the fiscal year 1973 that ended last June.

HEW Secretary Caspar Weinberger conceded that the budget reflects "in a number of ways the results of that give and take" involved in the battle with Congress last year over HEW appropriations.

No funds are sought for the Administration's new national health insurance program, even if Congress acted this year, Weinberger noted, it would take another year or longer to gear up for the program which carries a \$5.8 billion price tag.

The budget emphasized two controversial HEW programs of special interest to the medical profession. To carry out the Health Maintenance Organization (HMO) program, \$65 million was recommended for the remainder of this fiscal year, and \$65 million for next year. The Professional Standard Review Organization (PSRO) program was put down for \$34 million through the remainder of the current fiscal year; \$58 million, next year.

* * * *

COUNCIL MINUTES

The Council of the Arkansas Medical Society met at 11:30 A.M. on Sunday, February 10, 1974, in the Sheraton Hotel, Little Rock.

Present were: Long, Wood, Saltzman, Shuffield, Duzan, Fairley, Kirkley, J. Bell, Gray, Inman, P. Bell, Moore, L. Harris, Bethel, McCrary, Orr, Kolb, Henry, Kirby, Koenig, Chudy, Wilkins, Thomas, Ellis, Watson, Whittaker, Fowler, Applegate, Hyatt, Purcell Smith, Winston Shorey, George Mitchell, Bob Benafield, Austin Grimes, Ken Lilly, Kemal Kutait, Glen Baker, James Weber, M. H. Harris, R. H. White, W. Sexton Lewis, Mr. Paul Harris, Mr. Eugene

Warren, Mr. Schaefer, Miss Richmond, and Mr. McIntosh.

The Council transacted business as follows:

1. The Council approved a report on a meeting of the Executive Committee held January 23rd, by motion of Koenig.
2. Upon the motion of Orr, the Council voted to pay expenses for two representatives to the AMA-AMPAC Workshop in Washington in March. It was suggested that if a third person agreed to attend, expenses for the third person be shared by the three people.
3. A. S. Koenig, chairman of the Auxiliary Liaison Committee, presented the following recommendations of his committee:
 - (A) That the Society's Committee on Mental Health be asked to work with the Auxiliary committee in development of their proposal for a facility for the care of emotionally disturbed juveniles in the State. Upon motion of Koenig, the Council approved the recommendation.
 - (B) That the Society authorize its legal counsel, Mr. Warren, to communicate with the Auxiliary on the desirability of incorporating the Auxiliary and applying for tax-exempt status. Upon motion of Koenig, the Council voted its approval.
4. Reporting for the Insurance Committee, Charles Wilkins presented for the information of the Council material on (1) action of another state association regarding insurance company determinations of usual, customary and reasonable fees, and (2) communications with a state newspaper editor regarding desirability of not including in newspaper articles the amounts of professional liability malpractice suits until such cases actually go to court. The Council extended a vote of thanks to the Insurance Committee.
5. Upon the motion of Koenig and McCrary, the Executive Committee was authorized to designate a committee to propose plans for observance of the Society's centennial.
6. C. R. Ellis, chairman of the Committee on Medicine and Religion, presented two requests to the Council:
 - (A) That the Society authorize expenses up to \$250 for the Prayer Breakfast during

the annual meeting. Upon motion of Orr, the request was approved.

- (B) That a representative be sent to the regional conference of the AMA Department of Medicine and Religion in Chicago later this month. Upon motion of Saltzman, the Council voted to authorize expenses for Dr. Ellis to attend the conference.

7. The Council heard a report from Dr. Glen Baker on activities of the Regional Medical Program Advisory Committee. He discussed H. R. 12053, which is now in Congressional Committee, and its implications. The bill provides for creation of a network of area-wide "Health Services Agencies" to replace the Comprehensive Health Planning, Regional Medical and Hill-Burton Programs. Among other functions, the Health Services Agencies would review existing health services on a "certificate of need" basis.

In Executive Session, the Council transacted the following business:

1. Approved the Society Budget for 1974 as presented by H. W. Thomas, Chairman of the Budget Committee.
2. Approved the loan of \$6,000 to the Arkansas Foundation for Medical Care by the Society at the New York Prime Interest Rate. Motion for approval was by Harris and Koenig.

APPROVED: C. C. Long, M.D.

Chairman of the Council

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The meeting of the membership of the Arkansas Foundation for Medical Care was called to order at 2:00 P.M. on Sunday, February 10, 1974, at the Sheraton Hotel in Little Rock, by the Executive Vice President, Mr. Paul Schaefer.

Mr. Schaefer reminded the members that the Foundation had adopted new By-Laws at the November 25th, 1973, meeting, and that there were currently no elected directors and officers. He advised the members that the purpose of meeting was election of a board of directors.

Mr. Schaefer then called on Drs. Charles Wilkins and Amail Chudy and Mr. Eugene Warren to provide the members with background information on the Foundation, its purpose, its goals, and activities to date.

The floor was then opened for nominations for the Board of Directors. Nominations submitted were:

District 1 — 2 year term: Dr. John B. Kirkley, Jonesboro; 1 year term: Dr. Eldon Fairley, Osceola.

District 2 — 2 year term: Dr. John E. Bell, Searcy; 1 year term: Dr. Paul Gray, Batesville.

District 3 — 2 year term: Dr. Fred C. Inman, Carlisle, and Dr. Donald Fisher, Helena; 1 year term: Dr. L. J. Pat Bell, Helena, and Dr. W. T. Paine, Helena.

District 4 — 2 year term: Dr. John P. Burge, Lake Village; 1 year term: Dr. Raymond A. Irwin, Pine Bluff.

District 5 — 2 year term: Dr. J. B. Jameson, Camden; 1 year term: Dr. K. R. Duzan, El Dorado.

District 6 — 2 year term: Dr. Lynn Harris, Hope; 1 year term: Dr. Karlton Kemp, Texarkana.

District 7 — 2 year term: Dr. Robert McCrary, Hot Springs; 1 year term: Dr. James Bethel, Benton.

District 8 — 2 year term: Dr. William S. Orr, Jr., Little Rock, and Dr. Raymond V. Biondo, North Little Rock; 1 year term: Dr. W. Payton Kolb, Little Rock, and Dr. Mike Kent, Little Rock.

District 9 — 2 year term: Dr. Morriss Henry, Fayetteville, and Dr. H. V. Kirby, Harrison.

District 10 — 2 year term: Dr. A. S. Koenig, Fort Smith; 1 year term: Dr. C. C. Long, Ozark.

Upon motion of Wilkins, nominees for the first, second, fourth, fifth, sixth, seventh, ninth and tenth districts were elected by acclamation.

Ballots were cast for election of directors for the third and eighth districts. Elected were:

Third District — 2 year term: Dr. Fred C. Inman, Carlisle; 1 year term: Dr. L. J. Pat Bell, Helena.

Eighth District — 2 year term: Dr. William S. Orr, Jr., Little Rock; 1 year term: Dr. W. Payton Kolb, Little Rock.

There being no further business, the meeting was adjourned at 3:15 P.M.

Paul C. Schaefer,
Executive Vice President

* * * *

The Board of Directors of the Arkansas Foundation for Medical Care met at 3:20 P.M. on Sunday, February 10, 1974, in the Sheraton Hotel, Little Rock.

The meeting was called to order by the Executive Vice President, Mr. Paul Schaefer.

1. The floor was opened for nominations for the position of President/Chairman of the Board. C. C. Long was nominated by Orr. Upon motion of Gray, Dr. Long was elected by acclamation.

With Chairman Long presiding, the Board proceeded with its business as follows:

2. William S. Orr, Jr., Little Rock, was nominated for position of Vice Chairman of the Board. Upon motion of Koenig, Dr. Orr was elected by acclamation.
3. Dr. K. R. Duzan was nominated for the position of Treasurer by A. S. Koenig. Upon the motion of Kirkley, Dr. Duzan was elected by acclamation.
4. Dr. Elvin Shuffield of Little Rock was nominated by Kirkley for the position of Secretary. Upon the motion of Koenig, Dr. Shuffield was elected by acclamation.
5. Upon the motion of McCrary, the President/Chairman of the Board, Vice Chairman, Secretary and Treasurer were designated as an Executive Committee of the Board.
6. Upon the motion of Koenig, the Executive Vice President was authorized to execute contracts on behalf of the Foundation.
7. Upon the motion of Orr, the Board authorized signatures on drafts and checks on the Foundation by any two of the following: Dr. Kenneth R. Duzan, Mr. Paul Schaefer, and Miss Leah Richmond.
8. Upon the motion of Koenig, the Board voted to schedule the annual meeting of the Foundation on Wednesday, May 1, 1974, immediately following adjournment of the reorganization meeting of the Council of the Arkansas Medical Society.
9. Upon the motion of McCrary, the Board was authorized to borrow \$6,000 from the Arkansas Medical Society.
10. Upon the motion of Koenig, the Executive Committee of the Board was authorized to proceed with implementation of the pro-

posal presented by American Health Systems.

The meeting adjourned at 3:55 P.M.
C. C. Long, M.D.,
Chairman of the Board

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ALDERSGATE MEDICAL CAMP

Aldersgate Medical Camp will be conducted July 8-13, 1974, at Camp Aldersgate just outside Little Rock. The purpose of the camp is to provide outdoor camping experience for boys and girls eight to sixteen years of age who have medical problems or handicaps that preclude their attending a regular summer camp. Last year we had children with a variety of medical problems including diabetes, asthma, sickle cell disease, seizure disorders, and so forth. Questions concerning a child's eligibility should be directed to the Camp Director at 2000 Aldersgate Road, Little Rock 72205. A medical committee will review the applications. The Camp is sponsored by the Arkansas Chapter of the American Academy of Pediatrics and has been endorsed by the Arkansas Medical Society.

Campers are accepted on a first come first served basis and some scholarships are available, depending on the amount of donations from physicians and interested persons. Applications for scholarships and registration forms may be obtained by writing the Camp office. The telephone number is 225-1444.

Tax-deductible contributions may be made directly to the above address.



Auction Held For AMA-ERF Fund

The Sebastian County Medical Auxiliary recently raised \$145 for the American Medical Association's Education and Research Foundation at a bridge luncheon and talent auction at the home of Mrs. Neil Crow of Fort Smith.



PERSONAL AND NEWS ITEMS

Dr. Barclay Guest of TMA

Dr. David L. Barclay of the University of Arkansas School of Medicine was a guest speaker at the Texas Medical Association's Annual Session May 9-12, 1974. As guest of the Section of Obstetrics and Gynecology, spoke on "Depression in the Newborn", "Urinary Incontinence in Gynecology", and "Urological Complications from Carcinoma of the Cervix and Therapies of Carcinoma of the Cervix".

Physician Locates

Dr. William Nevins, an ophthalmologist, has joined Drs. Max Baldridge and Harold Beasley in their clinic in Heber Springs.

Physician Receives Sertoma Award

Dr. John W. Trieschmann was recently

awarded the Service to Mankind Award by the Hot Springs Sertoma Club. Dr. Trieschmann practices pediatrics in Hot Springs.

Doctors Retain AAFP Status

Drs. Milton D. Deneke of West Memphis and R. Jerry Mann of Arkadelphia have completed continuing education requirements to retain active memberships in the American Academy of Family Physicians.

Dr. Silverblatt Resigns at ARMP

Dr. Charles W. Silverblatt, co-ordinator of the Arkansas Regional Medical Program, has resigned and moved to Tampa, Florida, where he is employed by the Veterans Administration Hospital.



RESOLUTIONS



Dr. Franklin T. Oates

WHEREAS, God in his infinite wisdom has chosen to take from our midst Dr. Franklin T. Oates, and

WHEREAS, Dr. Oates had faithfully served his patients in the community at large throughout the years of his medical practice, and

WHEREAS, Dr. Oates during his years of practice reflected the ideals of the medical profession and the purposes of his Medical Society, and

WHEREAS, The Craighead-Poinsett County Medical Society mourns his loss,

THEREFORE BE IT RESOLVED, by the Craighead-Poinsett County Medical Society in regular session February 6, 1974, hereby adopts this resolution and directs that a copy be spread on the minutes of the Society, that a copy be furnished to the family, and that a copy be published in the Journal of the Arkansas Medical Society.

Dr. Thomas Price Foltz

WHEREAS, God, in his infinite mercy has seen fit to call from our midst Dr. Thomas Price Foltz, and

WHEREAS, Dr. Foltz has faithfully served his patients in this community throughout his many years of medical practice, and his country by distinguished service in the medical corps of the United States Navy, and,

WHEREAS, Dr. Foltz, during his years of practice has reflected throughout his medical career the highest ideas of his profession, and

WHEREAS, The Sebastian County Medical Society and his many, many friends mourn his loss,

THEREFORE, BE IT RESOLVED by the Sebastian County Medical Society, in regular meeting, assembled on April 9, 1974, to adopt these resolutions, and directs that a copy be spread on the minutes of the Society, and a copy be furnished to the family, and that a copy be published in the Journal of the Arkansas Medical Society.

THINGS TO COME



Cancer Society Conferences

The American Cancer Society and the National Cancer Institute will sponsor the following educational conferences. These will be acceptable for Credit Hours in Category I for the Physician's Recognition Award of the American Medical Association and for Elective Hours by the American Academy of Family Physicians. For details write American Cancer Society, 219 East 42nd Street, New York, New York 10017.

Part I: "Treatment and Rehabilitation", November 25-27, 1974, Waldorf-Astoria Hotel, New York City.

Part II: "Detection and Diagnosis", May 1-3, 1975, Denver Hilton, Denver.

The American Cancer Society's National Conference on Gynecologic Cancer will be held September 18-20, 1975 at the Marriott Hotel in Philadelphia, Pennsylvania. The Cancer Society and Cancer Institute's Eighth National Cancer Conference will be held September 20-22, 1976, at the Regency Hyatt Hotel in Atlanta, Georgia.



OBITUARY

Dr. Joseph P. DeLaney

Dr. Joseph P. DeLaney of Gainesville, Florida, died February 12, 1974, at the age of 86. He was a native of Green Bay, Wisconsin, who formerly practiced in Fayetteville, Arkansas.

Dr. DeLaney was graduated from the Atlanta College of Medicine, now known as Emory College of Medicine, in 1914. He was a member of the Washington County Medical Society, the Arkansas Medical Society, the American Medical Association, and a Lifetime Fellow of the American College of Surgeons.

He is survived by his wife, Mary, two sons and one sister.



NEW MEMBERS

Dr. Victor H. Barbour

The name of Dr. Victor H. Barbour has been added to the membership roster of the Saline County Medical Society.

Dr. Barbour is a native of Vancouver, British Columbia, Canada. He graduated from the University of Idaho, Moscow, with a B.S. in Bacteriology in 1912. He was graduated from Washington University School of Medicine in St. Louis in 1950. In 1951 he completed his internship at King County Hospital. His residency was completed at the University of California, where he also received a Masters in Public Health in 1961.

He is Board Certified by the American Board of Preventive Medicine and a member of the American Academy of Occupational Medicine, the American College of Preventive Medicine, Industrial Medical Association, and the American Public Health Association.

Dr. Barbour is currently practicing Occupational Medicine with the Arkansas operations of the Aluminum Company of America in Bauxite.

Dr. Nabil Kaddis Bissada

Dr. Nabil K. Bissada has been accepted for membership in the Pulaski County Medical Society. He is a native of Cairo, Egypt.

Dr. Bissada received a M.B.B.Ch. degree from Cairo University. He was graduated from the Cairo University Medical School in 1963 and completed his internship there in 1965. From 1965 to 1969 he was a resident in General Surgery at Bab El Shareia General Hospital in Cairo. He completed further internship work at the New Jersey College of Medicine and Dentistry at Newark in 1970. He completed his Urology residency at the University of North Carolina in Chapel Hill in 1973.

He is a member of the Womack A. Nathan Surgical Society, the Southeastern Section of the

American Urological Association (Associate Member), and the American Medical Association.

Dr. Bissada is an Assistant Professor, Division of Urology, at the University of Arkansas School of Medicine in Little Rock.

Dr. Julian Dale Calhoon

The Pulaski County Medical Society has accepted for membership Dr. Julian D. Calhoon, a native of Helena, Arkansas.

Dr. Calhoon attended the University of Arkansas, where he received a B.A. and a M.S. degree. He was graduated from the University of Arkansas School of Medicine in 1972. His internship was completed at Saint Vincent Infirmary in Little Rock.

He is presently in Family Practice, associated with Durham-McCrary-Anderson, P.A., at #2 Crestview Plaza in Jacksonville.

Dr. Sam J. Scroggins

Dr. Sam J. Scroggins has recently been accepted for membership in the Boone County Medical Society. He is a native of Harrison, Arkansas.

Dr. Scroggins was graduated with a B.S. degree from Arkansas Polytechnic College in Russellville in 1968. He was graduated from the University of Arkansas School of Medicine in 1972. His internship was completed at Saint Vincent Infirmary in Little Rock.

Dr. Scroggins is in General Practice, associated with Dr. Robert H. Langston and Dr. Joe B. Wilson at the Family Doctors Clinic, P.A., 520 North Spring Street, Harrison.

Dr. E. Leon Barnes

The Craighead-Poinsett County Medical Society has accepted Dr. E. Leon Barnes for membership. He is a native of Jonesboro.

Dr. Barnes attended Arkansas State University and was graduated from the University of Arkansas School of Medicine in 1966. He completed a straight Pathology internship at the University of Pittsburgh School of Medicine in 1967. Dr. Barnes served in the Army at the United States Darnall Army Hospital, Fort Hood, Texas, from 1967 to 1969. He then returned to the University of Pittsburgh and completed his Pathology residency in 1972.

Dr. Barnes is Board Certified by the American Board of Pathology and is practicing Anatomical and Clinical Pathology at the Doctors Pathology Building in Jonesboro.

Dr. Howard S. Henjyoji

The Chicot County Medical Society has accepted for membership Dr. Howard S. Henjyoji, a native of Minidoka, Idaho.

Dr. Henjyoji was graduated from Harvard University, Cambridge, Massachusetts, with a B.A. degree in 1967. He earned his M.D. degree in 1971 at the University of Oregon Medical School, Portland. His internship was completed at Memorial Hospital of Long Beach, Long Beach, California. He is serving in the National Health Service Corps of the United State Public Health Service until July of 1974.

Dr. Henjyoji is practicing General Medicine at the Lake Village Clinic with Drs. Charles D. Blackmon, John H. Burge, and John P. Burge.

Dr. Henry A. Lile

Dr. Henry A. Lile, a native of Little Rock, has been accepted for membership in the Pulaski County Medical Society.

Dr. Lile was graduated from Henderson State College in Arkadelphia in 1955 and the University of Arkansas School of Medicine in 1960. His internship was completed at Wilford Hall Hospital, Lakeland Air Force Base, Texas, in 1961. His Radiology residency was completed in 1966 at the University of Arkansas Medical Center in Little Rock.

He was with Texarkana Radiology Associates from 1966 to 1973 and is Board Certified in Radiology. Dr. Lile is now in private practice at 1100 Medical Towers Building in Little Rock.

Dr. Rex Watson Ross

The White County Medical Society has accepted for membership Dr. Rex W. Ross. He is a native of Fayetteville, Arkansas.

Dr. Ross was graduated from the University of Arkansas in 1968 with a B.A. degree. He was graduated from the University of Arkansas School of Medicine in 1972. His internship was completed at Saint Vincent Infirmary in Little Rock.

Dr. Ross is in Family Practice and associated with the Searcy Medical Center, P.A., at 2900 Hawkins Drive, Searcy.

Dr. John C. Dobbs

A new member of the White County Medical Society is Dr. John C. Dobbs, a native of Little Rock, Arkansas.

Dr. Dobbs attended Little Rock University, graduating in 1968. He was graduated from the

University of Arkansas School of Medicine in 1972. He completed his internship at Saint Vincent Infirmary in Little Rock.

Dr. Dobbs is practicing Family Medicine at the Searcy Medical Center, P.A., at 2900 Hawkins Drive, Searcy.

Dr. Irving Clayton Ringdahl

The Pulaski County Medical Society has added the name of Dr. Irving C. Ringdahl to its membership roll. He is a native of McVille, North Dakota.

Dr. Ringdahl was graduated from Augsburg College and Theological Seminary in Minneapolis, Minnesota, with a B.A. degree in 1952. He completed additional studies at the University of North Dakota at Grand Forks in 1953. He received a B.S. in Medicine from the University of North Dakota Medical School in 1955. He was graduated from the University of Kansas Medical School in Kansas City in 1957. His internship was completed at Bethany Hospital in Kansas City in 1958. He completed residency work in Adult Psychiatry in 1971, and Child Psychiatry in 1972, at University of Iowa State Psychopathic in Iowa City.

He is a member of the American Psychiatric Association and the Iowa Psychiatric Society.

Dr. Ringdahl is a Child Psychiatrist in the Division of Child and Adolescent Psychiatry at the University of Arkansas Medical Center in Little Rock.

Dr. Rebecca P. Flowers

The Franklin County Medical Society has accepted for membership Dr. Rebecca P. Flowers. She is a native of Mena, Arkansas.

She attended the University of Arkansas and State College of Arkansas. Dr. Flowers was graduated from the University of Arkansas School of Medicine in 1972. She completed her internship at the Baptist Medical Center in Little Rock.

Dr. Flowers is currently in General Practice at 110 West Commercial in Ozark.

Dr. John Samir D. Sulieman

The Pulaski County Medical Society has accepted for membership Dr. John Sulieman. He is a native of Gaza, Palestine.

Dr. Sulieman was graduated from Cairo University Medical School, Cairo, Egypt, in 1961. His internship work was completed at Southern Baptist Hospital in New Orleans, Louisiana, in

1966. He did residency work in General Surgery in 1967 and in Urology in 1970 at the University of Arkansas Medical Center in Little Rock.

He is Board Certified in Urology and has held teaching appointments as Assistant Professor in Urology at Rush Medical College in Chicago and as an Assistant Professor at the University of Arkansas Medical Center in Little Rock. He is a member of the Arkansas Urological Association.

Dr. Sulieman is now in the private practice of Urology at 518 West 26th in North Little Rock.

Dr. J. L. Stinnett

A new member of the White County Medical Society is Dr. J. L. Stinnett. He is a native of Gurdon, Arkansas.

Dr. Stinnett attended Hendrix College in Conway, Arkansas, and was graduated from the University of Arkansas School of Medicine in 1967. His internship was taken at Saint Vincent Infirmary in Little Rock. He completed his residency work there in Pediatrics in 1973. He is Board Certified in Pediatrics.

Dr. Stinnett is practicing Pediatrics with the Searcy Medical Clinic, P.A., at 2900 Hawkins Drive, Searcy.

Dr. Dwayne L. Ruggles

A new member of the Pulaski County Medical Society is Dr. Dwayne L. Ruggles, a native of Fairfield, Iowa.

Dr. Ruggles received his B.S. degree from the University of Missouri, Columbia, in 1961 and was graduated from the University of Missouri School of Medicine in 1967. The United States Public Health Hospital in New Orleans was where he completed his internship in 1968. His residency work was completed in Otolaryngology in 1973 at the University of Arkansas Medical Center in Little Rock.

Dr. Ruggles is practicing Otolaryngology at 526 West 26th in North Little Rock.

Dr. Carlton Lee Chambers, III

Dr. Carlton L. Chambers, III, has been accepted for membership in the Boone County Medical Society. He is a native of El Dorado, Arkansas.

Dr. Chambers is a graduate of Centenary College in Shreveport, Louisiana. He was graduated from the University of Arkansas School of Medicine in 1964. His internship was completed at

the United States Naval Hospital in San Diego, California in 1965. He served three years of fleet duty with the Navy. Dr. Chambers completed a General Surgery residency at the University of Arkansas Medical Center in 1969. He served as an instructor in Otolaryngology at the Louisiana State University Medical School in Shreveport in 1972 and 1973, where he also completed his residency in Ear, Nose, and Throat Medicine.

He is presently practicing Otolaryngology at the Boone County Medical Center, 651 North Spring Street in Harrison.

Dr. William W. Richardson

The Saline County Medical Society has accepted for membership Dr. William W. Richardson, a native of Mercer, Pennsylvania.

Dr. Mercer received a B.A. degree from Amherst College, Amherst, Massachusetts, in 1934. He was graduated from the University of Pennsylvania School of Medicine in Philadelphia in 1938. His internship was taken at Saint Frances Hospital, Pittsburgh, Pennsylvania. He completed Psychiatric residencies at Bellevue Hospital, New York University Medical Center in New York City, Ohio State University Hospital in Columbus, and Central State Hospital, Norman, Oklahoma.

He is a member of the American Psychiatric Association and the Oklahoma Psychiatric Society. Prior to locating in Arkansas, he was in private Psychiatric practice in Seattle, Washington; Mercer, Pennsylvania; and Salina, Kansas.

Dr. Mercer is now in Psychiatric practice at the Benton State Hospital.

Dr. Robert Lee Hotchkiss

The Pulaski County Medical Society has added the name of Dr. Robert Lee Hotchkiss to its membership roll. He is a native of Wichita, Kansas.

In 1966 he graduated from Washington University in St. Louis, Missouri. He received his M.D. degree from the University of Arkansas School of Medicine in 1970. His internship was completed at Hillcrest Medical Center, Tulsa, Oklahoma, in 1971.

Dr. Hotchkiss is now in Public Health work with the Arkansas State Department of Health in Little Rock.

Dr. Keith Cameron Keeler

The Pulaski County Medical Society has accepted for membership Dr. Keith C. Keeler. Dr. Keeler is a native of Jackson, Minnesota. He received an A.B. degree from Occidental College in Los Angeles, California, in 1939. He was graduated from the University of Michigan Medical School at Ann Arbor in 1944. Dr. Keeler completed his internship at Virginia Mason Hospital, Seattle, Washington, in 1944. He practiced General Medicine in Lewiston, Idaho, from 1946 until 1948. Dr. Keeler completed residency work in Physical Medicine and Rehabilitation at New York University—Bellevue Medical Center in New York City in 1951.

Dr. Keeler held teaching appointments as an Assistant Professor at Case Western Reserve University School of Medicine, Cleveland, Ohio, from 1951 to 1953, and as Assistant Professor in Clinical Rehabilitation at New York University from 1960 through 1973.

He is certified by the American Board of Physical Medicine and Rehabilitation Medicine, the American Rheumatism Association, the American Geriatric Society, and the American Institute of Ultrasound in Medicine.

Dr. Keeler is practicing Physical Medicine and Rehabilitation at the Baptist Medical Center in Little Rock.

Dr. Kerry Lowell Ozment

Dr. Kerry L. Ozment has been accepted for membership in the Pulaski County Medical Society. He is a native of Jackson, Mississippi.

Dr. Ozment attended Arkansas State Teachers College in Conway and the University of Arkansas. He was graduated from the University of Arkansas School of Medicine in 1966. His internship was completed at the University of Arkansas Medical Center in Little Rock. He finished his residency work there in General Surgery in 1973.

Dr. Ozment is now practicing General Surgery at 5512 West Markham in Little Rock.

Dr. Gerald Austin Stolz, Jr.

The Pope-Yell County Medical Society has added to its membership roll the name of Dr. Gerald A. Stolz, Jr. He is a native of El Dorado, Arkansas.

His pre-medical education was completed in

1965 at Hendrix College in Conway, Arkansas. He was graduated from the University of Arkansas School of Medicine in 1969. His internship was completed at the University of Arkansas Medical Center in Little Rock, as well as his Pathology residency.

Dr. Stolz served in the United States Public Health Service and is a member of the American Society of Clinical Pathologists. He is currently the Anatomical and Clinical Pathologist for Saint Mary's Hospital in Russellville, the Dandanelle Hospital, and the Yell County Hospital in Danville.

Dr. Elizabeth Sue Chambers

A new member of the Boone County Medical Society is Dr. Elizabeth S. Chambers. She is a native of Arkadelphia, Arkansas.

Dr. Chambers attended Hendrix College in Conway and was graduated from the University of Arkansas School of Medicine in 1964. She completed a rotating internship at San Diego County General Hospital in 1965. Pediatric residencies were completed at San Diego County General Hospital in 1966, University of Arkansas Medical Center in 1969, and Confederate Memorial Medical Center in Shreveport, Louisiana, in 1970. Dr. Chambers was an instructor in Pediatrics at Louisiana State University Medical School in Shreveport for three years.

She is a member of the American Academy of Pediatrics and Board Certified in Pediatrics by the American Board of Pediatrics. Dr. Chambers is now practicing Pediatrics at the Boone County Medical Center, 651 North Spring Street in Harrison.

Dr. Marion Powell Hazzard

The Greene-Clay County Medical Society has accepted for membership Dr. Marion P. Hazzard, a native of Little Rock. He received his B.A. degree from Hendrix College in 1964 and was graduated from the University of Arkansas School of Medicine in 1968. Internship was taken at Mercy Hospital, Des Moines, Iowa, and he completed his residency at the University of

Texas Medical Branch at Galveston. He is a member of the Singleton Surgical Society.

Dr. Hazzard is practicing Orthopedic Surgery at 912 West Vine Street in Paragould.

Dr. Donald R. Harris

The name of Dr. Donald R. Harris has been added to the membership roll of the Pulaski County Medical Society. He is a native of Vian, Oklahoma.

Dr. Harris attended Texarkana Junior College and Southern State College in Magnolia, Arkansas. He was graduated from the University of Arkansas School of Medicine in 1961. In 1962, he completed his internship at William Beaumont Army Hospital in El Paso, Texas. Residencies in Radiology were completed at the University of Texas Medical Branch in 1968 in San Antonio, and Louisiana State University Medical School in Shreveport in 1969. He completed a Radiation Therapy residency in 1971 at the University of Washington School of Medicine in Seattle.

He is a member of the American Society of Therapeutic Radiology and Board Certified in Radiology. Dr. Harris is currently an instructor in Radiation Therapy at the University of Arkansas School of Medicine in Little Rock.

Dr. James H. Golleher

The White County Medical Society has accepted for membership Dr. James H. Golleher. He is a native of El Dorado, Arkansas.

Dr. Golleher received his B.S. degree in 1966 from Louisiana Polytechnic Institute in Ruston. In 1970 he was graduated from the University of Arkansas School of Medicine. He completed his internship and residency in Pathology at the University of Arkansas Medical Center in Little Rock.

Dr. Golleher is practicing Clinical and Anatomical Pathology at 910 East Race in Searcy.

Dr. Karl Dan Moser

The Pulaski County Medical Society has accepted for membership Dr. Karl Moser, now in Pathology residency training at the University of Arkansas Medical Center in Little Rock.



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NOV 25 1975

7 DAY

APR 12 1976

RETURNED

APR 13 1976

7 DAY

OCT 17 1977
RETURNED

OCT 11 1977

27

